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EDUCATION ACT PROJECT EVALUATION. PART II.

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THIS REPORT CONSISTS OF EVALUATIONS OF SIX ELEMENTARY AND SECONDARY EDUCATION ACT, TITLE I (ESEA) PROJECTS CONDUCTED IN CINCINNATI, OHIO, PUBLIC SCHOOLS DURING THE 1965-66 SCHOOL YEAR. THE PROJECTS OFFERED (1) EARLY CHILDHOOD EDUCATION, (2) SPEECH IMPROVEMENT, (3) REMEDIATION OF EMOTIONAL AND LEARNING PROBLEMS, (4) PHYSICAL HEALTH SERVICES, (5) STAFF LEADERSHIP DEVELOPMENT, AND (6) INSERVICE TRAINING. EACH OF THE SIX EVALUATIONS IS ORGANIZED IN AN IDENTICAL MANNER. THE FIRST MAJOR SECTION OF EACH REPORT CONSISTS OF A CHRONOLOGICAL LOG OF THE OPERATIONAL PROCEDURES OF THE PROJECT. DISCUSSED HERE ARE IMPLEMENTATION OF PROJECT OBJECTIVES, SCHEDULING, PROGRAMING, MATERIALS, AND SOME ANECDOTAL INFORMATION. A SECOND MAJOR SECTION OF EACH REPORT DESCRIBES EVALUATION PROCEDURES AND RESULTS. A FINAL SECTION CONTAINS CONCLUSIONS AND RECOMMENDATIONS. ALL SIX OF THE PROJECTS WERE RE-FUNDED, ALTHOUGH SEVERAL OF THEM WERE COMBINED, THUS PERMITTING ONLY FOUR DISTINCT PROJECTS TO CONTINUE. THIS ARTICLE IS PUBLISHED IN THE "JOURNAL OF INSTRUCTIONAL RESEARCH AND PROGRAM DEVELOPMENT," VOLUME 2, NUMBER 3, FEBRUARY 1967. (DK)

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EDUCATION ACT PROJECT EVALUATION
PART II

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PREFACE

This issue of the Journal is the third and last of a series reporting the evaluation of Title I, ESEA projects operated in the Cincinnati Public Schools during the 1965-66 school year. While Volume 2, Number 1 reported program evaluation, Number 2 and the current Number 3 report individual project evaluations.

For ease of administration and economy, four of the six projects reported in this issue have been welded into two projects for the current 1966-67 school year. The two teacher training projects have been combined under the project title, "Staff Development, Leadership and In-Service Training." The Speech Improvement and Emotional and Learning Problems projects now operate under the title, "Emotional, Learning and Communications Problems."

As was pointed out in the last issue, maximum understanding of the reports in this journal will result from reading the issue devoted to program evaluation (Volume 2, Number 1).

Each report has two major divisions, which follow the introduction and the statement of objectives. The first main part, entitled "Project Narrative," is essentially a chronological logging of procedures, events, obstacles, etc. as they took place in operating the project. Because the focus of these accounts is project operation, they are likely to be of interest to personnel involved in similar projects. The narratives were contributed by the 1965-66 project directors.*

The second major division of each report deals with evaluation procedures and results. Evidence bearing on the fulfillment of each objective is presented. As one reads through these evaluation sections, it will be noted immediately that there are wide variations in the validity of the evidence used to evaluate project objectives. In some instances the results are "self evident," while in other cases the evidence is very tenuous. This situation is the result of many factors, e.g., poorly stated objectives and unmeasurable objectives. The most serious deterrent to the measurement of objectives, however, was the lack of adequate control groups. Unbiased experimental designs can result only from a randomization of uncontrolled factors that may influence results. Such designs are impossible in this context, because the charge of ESEA has been to serve the most disadvantaged children. Unbiased comparisons, therefore, are not possible because of the selection factor operating. This explanation is not an excuse; it is a reality which demands innovative models of evaluative strategies. The Division of Program Development welcomes constructive criticism and suggestions for better evaluation approaches. Further it is hoped that a mutual sharing of tailor-made instruments will serve to benefit the Cincinnati Public Schools and other school systems.

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*Early Childhood Education, Anna Marie Evans; Speech Improvement, Eugene Stevens; Emotional and Learning Problems, Clifford Lochhaas; Physical Health Services, William Streit; Staff Leadership Development, Sarah Metzger; In-Service Training, Althea Beery.

There has been only a limited attempt to report the details of statistical methodology. We felt that such reporting would add too much to the length of the report and would be of limited interest to the practitioner. When the term "significant" is used in describing an observed difference, this means statistically significant difference and based on some type of statistical test. Persons wishing explanation of statistical methods need only submit such request to the Division of Program Development.

Limited copies of each chapter of this report are available to those persons whose interest is primarily associated with that given project.

Requests for additional copies of this journal or for separate copies of each project's evaluation should be made to Mr. Joe Felix, Associate in Program Development.

James N. Jacobs
Editor

EARLY CHILDHOOD EDUCATION

Introduction

This project was initiated to provide experiences to children before they reach the first grade which would enable them to succeed and to adjust better in the elementary grades. Studies by Bloom and others have indicated that the development of children follows a rather stable pattern which reveals that approximately fifty per cent of a child's academic growth is achieved by the time he is in the third grade. If educators are to intervene effectively in a child's development, the implication is to do so at a relatively early age. The project aimed at children who were ages 4, 5, and 6. Some of them had experienced one year of kindergarten and needed additional summer training preparatory to entering grade one. Others had not as yet entered kindergarten and needed further development of social and cognitive skills necessary to take full advantage of the kindergarten experience.

It was believed that one of the most significant characteristics of the disadvantaged child was his lack of an adequate self-image. Often parents of such children are indifferent or even rejecting toward their children. There is little motivation for achievement since there is little reward. The result is a dependence on immediate gratifications and concurrently a lack of ability to strive for more remote goals such as those typified in the academic curriculum. The problem is compounded by the frequent absence of persons in the immediate environment who can serve as models. The importance of parent education and the early influence of teachers and teacher aides who are models to emulate is emphasized. A warm and accepting classroom atmosphere, in which teacher and other parent figures have the time and interest to give to children, should do much to create a favorable self-image for the child and to provide him with success experiences which will prepare him for academic work.

Another purpose for this project was to provide a stimulating curriculum in which disadvantaged children can develop concepts which may not have been developed in earlier childhood experiences. Concepts of size, weight, color, length, time, etc., were believed lacking in disadvantaged children. Typically, knowledge of these concepts is taken for granted by the time the youngster reaches the first grade. The absence of these concepts leads almost immediately to the child "tuning out" classroom instruction since it becomes meaningless and defeating to the child.

Lack of conversation and other conditions in the home leads to poor language facility and an inability to listen. This project provided small classes, with teacher aides, which permitted each youngster an opportunity to talk with an interested adult person.

The project also provided some of the basic nutritional requirements of children in order to permit them to be alert and receptive to learning. Poor health and hunger are the basic deterrents to a healthy mind and readiness to learn. Provision for mental and physical health also was included in this project.

The project consisted of three components each involving selection of staff and children, training programs for all staff members, varied and selected materials and equipment, parent education and involvement and evaluation. These components are as follows:

I. Follow-Up of Operation Head Start 1965, February 7 to June 17, 1966. Follow-up study of approximately 1800 children who participated in 1965 Head Start and who were currently enrolled in kindergarten.

II. Pre-Kindergarten Centers, February 7 to July 29, 1966. Established 3 centers with 6 classes and serving approximately 120 children. These were in addition to others established under OEO.

III. Pre-Grade One Classes, June 20 to August 12, 1966. Established 30 centers with 40 classes; approximately 800 children.

Objectives

1. To develop a satisfying self-concept
2. To provide certain nutritional needs and mental and physical health services
3. To develop cognitive and sensory skills which are assumed to be present by the time children reach the first grade
4. To increase language facility
5. To develop listening skills
6. To develop desirable social skills through experiences in group living
7. To provide for parent education and increase parent involvement
8. To develop skills considered necessary for reading readiness.

Project Narrative

Upon approval of the project on January 6, 1966, the project was outlined and discussed with the principals of the target schools at a meeting on January 27, 1966. Since the three components were identified separately, they will be discussed separately.

Follow-Up Head Start. The major services involved in this component were kindergarten aides and psychiatric, medical, and dental services given to pupils involved in the 1965 summer Head Start program.

The assignment of an aide to kindergarten made it possible for the teacher to devote more time to individual and small groups of children and relieve her from routine tasks. Following public announcement of the kindergarten aide position and recommendations of principals, interviews were scheduled at the Board of Education. Staff Personnel, primary supervisors, and principals worked as a team to interview each applicant and make recommendations regarding employment. Assignments were to be made later.

A letter was sent to each kindergarten teacher informing her of the aide program and the responsibilities of the aides. Participation in the program by kindergarten teachers was on a voluntary basis. Of the 63 teachers with Head Start pupils in their classes, 59 requested aides, while 4 chose not to use them.

During the month of February, several things were done. First, a training program for kindergarten aides was held and included classroom visits before the aides began work. Secondly, a meeting of kindergarten teachers was held to suggest ways for effectively working with aides. Third, there was local school visitation by the project staff with principal, teacher, and aide to further interpret the program and to help in tailoring it to the demands of the local school.

Head Start 1965 confidential records indicated that approximately 121 children (about 7% of the total number) had adjustment problems either because of personal problems or problems within the home, which seemed to require the help of a psychiatrist.

During the months of February and March, meetings were held of the project staff and the staff of the Child Guidance Home, a unit of the College of Medicine, University of Cincinnati. The purpose was to explore ways to implement the program and to establish guidelines. The services of six psychiatric fellows were contracted. The psychiatrists were to observe in the classroom, consult with individual children, and confer with school personnel as needed. Kindergarten teachers were responsible for identifying children who needed psychiatric help. Information was supplied by the classroom teacher for each child referred. In addition, a psychological examination and social service data, when available, were compiled by the social worker attached to the project. From April to June, each one of the six psychiatrists observed at least one child in the classroom, consulted with the child outside the classroom setting, and conferred with the teacher and/or other staff members and wrote a detailed report of his observation.

At the close of the school year, active cases were transferred to the office of the psychiatrist, Division of Health and Safety Services, Cincinnati Public Schools, for follow-up during the next school year.

In order that a more definitive record of medical follow-up might be established, health record folders of a special color were used to indicate those children enrolled in Head Start. The folders were housed in the doctor's office at the local school. Arrangements had been made with the Cincinnati Health Department to follow-up within the local school any physical defects found in the health examination given to all children enrolling in the Head Start program. Approximately 520 children are being followed-up because of dental needs.

As a result of the Head Start experiences of children which included new techniques and instructional materials developed, the impact of the project on the kindergarten curriculum had to be assessed. Consequently, the Division of Elementary Education organized a Kindergarten Study Group. This group is studying the Head Start impact and will recommend ways and means of adjusting the kindergarten curriculum to more closely articulate with previous pupil experiences.

Pre-Kindergarten Classes. Several such classes had been in operation under the OEO program and were believed to be so effective that additional classes under ESEA were established. The major problem was one of finding space to conduct these classes. Only three schools had sufficient space. After recruiting teaching personnel for the three centers, equipment and supplies were ordered. The latter included:

- .Outdoor play equipment - large steel wagon, tricycle, nesting bridges, balls, ring toss game, wood hoops
- .Indoor play equipment - hollow blocks, balance boards, large transportation toys, doll and housekeeping toys, manipulative and perception-building materials, puzzles and play toys, record player and recordings, listening posts, and musical instruments

.Supplies - crayons, paints, scissors, paper

.Books - stories, both fanciful and realistic; poems; finger plays; and picture books.

In February a training program was held for instructors and instructor assistants. This training included acquainting staff with the characteristics of the pre-kindergarten child, familiarizing them with the curriculum, and help in organizing classrooms. Lectures and discussions by resource persons in the fields of social welfare, psychology, health, and child development were also included.

In addition to the one-week orientation program, bi-monthly meetings of head instructors with the coordinator and supervisor of Early Childhood Education were held to plan and evaluate the program for each center. The head instructor conducted weekly meetings for the staff of her center. A monthly meeting of staff from all centers also was scheduled.

On February 28, 1966, six classes in the three centers began operation. Early in May a decision was made to extend the program from June 17 to July 29. In the summer session, morning and afternoon sessions were combined into one session from 8:30 - 12:30.

Language and concept development comprised the core of the curriculum. The development of perceptual skills, sensory activities, and field trips were included in the curriculum. Parents were encouraged to participate in the program through classroom visitation, center newsletters, and planned field trips.

Pre-Grade One Classes. These classes provided additional time and experiences during an eight-week summer program for the reinforcement of skills and abilities developed in the kindergarten and introduced other preparatory activities for first grade. While major emphasis was upon language development and reading readiness, attention was given also to the arithmetic and handwriting readiness activities. Thus, the major purpose of pre-grade one classes was to prepare children to read when they entered first grade.

At a meeting of principals in early May, fact sheets were distributed listing pertinent information about the program. Forty classes were established in the primary and secondary target schools.

During the months of April and May, teachers and teacher aides* were recruited and equipment and supplies were ordered. Principals were responsible for identifying children (by June 1) who met the following criteria:

1. Kindergarten children who had a score of 40 or below on the Metropolitan Readiness Test administered to children in the spring of 1966 and who were 6 years 2 months or below in age, as of June 1,

   OR

   Children who were near this readiness range and who, in the judgment of teachers, needed this experience,

   OR

   Children who had not attended kindergarten, but met the requirements outlined above. (Parents were responsible for bringing the child to the school for the test.)

2. Parents who would accept the fact that if the child was enrolled, he would attend for the full session.

On June 14, an orientation meeting of the staff was held. Its purposes were similar to those outlined for the pre-kindergarten orientation workshop. As a follow-up to these meetings, two others were held in Guilford School during July to discuss administrative details and the curriculum. On June 20, classes began operation including the serving of lunch.

The daily schedule was flexible and informal but sufficiently sequential to help the child adjust to the necessary routine of school life. Enrichment activities to provide for the gaps in conceptual development were introduced to build upon those introduced and developed during the kindergarten year. The language program provided the structure for the program and included all types of language experiences: speaking, listening, composing news bulletins and stories, choral speaking, finger plays, and recordings of class experiences. Provision for activities which promote perceptual development were essential and included in the program.

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*Many of the kindergarten aides or parent leaders were employed in this (summer) program.

Field trips were a part of the curriculum and were concerned with making use of the urban child's experiences in his local neighborhood in order to widen his experiences.

The pre-grade one component was evaluated partially through a goal card administered on a pre- and post-test basis. Succeeding sections of this report will deal with the results of this instrument. The experiences of each child were also evaluated by the classroom teacher. The evaluation report, sent to the pupil's home, included evidence of improvement in such areas as learning to follow directions, learning the letters of the alphabet, learning the numbers from 1 to 5, adjustment to school routines, etc.

Evaluation Procedures and Results

The Early Childhood Education project consisted of three rather distinct parts, each dealing with children at a slightly different age, i.e., pre-kindergarten age, kindergarten age, and post-kindergarten age. While certain objectives listed above were common to all components, other objectives were associated with only one or two of the three components. Considerable time was spent in developing instruments thought to measure the kinds of skills and abilities being sought in the various components. Practically nothing is available at the present time to measure the effects of the type of achievements involved in this project. For the most part, the types of evidence reflected in the evaluation were those connected with cognitive types of abilities rather than goals which might be considered in the affective domain. This should not be construed to mean that the latter are less significant but rather that measurement of cognitive learning usually is a relatively simple process as compared to measurement of attitudes, values, self-concept, etc.

In the Pre-Kindergarten Component the major source of evidence for evaluation was a pre-kindergarten goal card tailor-made by a special committee for use in this project. This goal card consisted of 99 items measuring a number of skills and abilities which were either observed directly or judged by the teachers involved. These 99 items were classified into 13 categories such as physical coordination, relationship of people and things, auditory discrimination, concepts of size, etc. The pre-kindergarten goal card was administered by the classroom teacher in several consecutive sessions on a per pupil basis. The instrument was administered within the first few weeks after the six classes started in February of 1966 and was given again in June, 1966 a month prior to closing of classes. Pre- and post-test measurements on the goal card were appropriate for the measurement of change of project children. No comparison was made of the performance of these youngsters on the goal card in relation to other similar youngsters who were not enrolled in the project. This is a serious limitation in judging project effectiveness. Several similar pre-kindergarten classes were started, however, under the Office of Economic Opportunity the previous September (1965). The performance of these classes offered an excellent opportunity to judge the difference in goal card performance with the ESEA children who received 4 months of class participation as compared to the OEO classes which had a full 10 months of operation starting in September, 1965. Since the goal card was not devised at the time the OEO classes began, only post-test measurements of OEO children were available for comparison with the ESEA classes. Still another comparison of goal card performances was made with typical suburban pupils in their first month of kindergarten. The responses made by these suburban kindergarten children were viewed as standards against which to compare the performance of the other two types of classes.

Additional evaluative evidence for the pre-kindergarten component was gained by studying the marks given to these pupils at the end of their first semester in kindergarten. The pupils studied were those who began the pre-kindergarten component under the OEO program. Thus, they had a full year of instruction before entering kindergarten. The marks given to these pupils after one semester were compared with those of comparable classes in the same schools attended by the kindergarteners who had not taken the pre-kindergarten program. These comparisons are fairly unbiased except for the fact that entry into the pre-kindergarten component was voluntary and thus, only parents who had sufficent interest in their child's education permitted their child to enroll. The nature and extent of this bias is unknown.

The evidence used for evaluating the pre-grade one component consisted of two parts; a pre-grade one goal card similar to that described for pre-kindergarten above, and secondly, the results of the Metropolitan Reading Readiness Test. The pre-grade one goal card was administered to 40 classes at the beginning of the summer program in June and was readministered to 20 classes either six or eight weeks later, depending on the duration of the classes. Some of the pre-grade one classes continued for six weeks and others for eight depending on whether they were linked with a Head Start center. This differential in program duration permitted comparison to be made in goal card performance with duration of program. Thus, the goal card testing permitted observations to be made of pupil change from pre-test to post-test as well as a comparison of scores depending on the length of time they were in the program. In addition to the goal card, pupils took the Metropolitan Reading Readiness Test in May of their kindergarten year. This test was re-administered to 20 classes at the end of the (summer) pre-grade one component to determine whether significant increases in reading readiness, as measured by this instrument, had occurred. Unfortunately, comparisons with suburban pupils were not available.

Since one of the major services given in the Head Start Follow-Up component was that of providing kindergarten aides, a survey of both aides and teachers was made in May to obtain their views on various values and procedures of the component. Next, medical and dental records were kept to some extent and these are reported. A comparison of results on the Metropolitan Reading Readiness Test also was made between former Head Start and non-Head Start pupils in the same set of target schools. These comparisons were made at various percentile points. It should be pointed out that comparisons of former Head Start and non-Head Start pupils may be biased because of a selection factor, but the direction of bias is unknown. On the one hand, the program was voluntary (thus more interested parents), on the other hand Head Start children tended to be from most economically deprived families.

At the end of the first semester, marks of children in kindergarten who had completed the summer 1965 Head Start program were analyzed and compared to the marks of non-Head Start children in the same schools and usually the same classes. These comparisons have relevance to the Head Start program itself and not to the follow-up component per se. They are reported, however, because of their similarity in content and purpose to the three components of this project. Children are evaluated as "satisfactory" or "needs improvement" in each of 17 areas of behaviors indicated on the report card.

Now we shall turn to results bearing on the achievement of each objective.

Objective 1: To Develop a Satisfying Self-Concept

No objective measurement or evidence is available to determine whether a "satisfying self-concept" was achieved in any of the three components to this project. It should be pointed out that a statement of this objective assumes that a satisfying self-concept was not prevalent among these disadvantaged children. Rather than being an assumption it should be stated as an hypothesis. While some studies do show that the self-concept of disadvantaged children is poor, local attempts at the measurement of self-concept in later grades have not borne out these findings.[1] If a poor self-image is not characteristic of pupils in later grades, it would seem unlikely that this situation would be reversed with younger pupils.

One of the common elements characteristic of all three components of the Early Childhood Education project was to decrease teacher-pupil ratio. Both pre-kindergarten and pre-grade one classes did not exceed 15 pupils and in addition, aides were present in the classroom. The follow-up Head Start component had classes of normal size but those classes also had kindergarten aides. Informal comments made by teachers in this project during project staff meetings would indicate that children benefited by virtue of their being in small classes and/or where much more individualized attention was possible. When kindergarten teachers with aides were asked to "list four things you are able to do that you could not do otherwise" (without an aide), 47 out of 56 listed their freedom to give more individualized attention to pupils. Of further interest is the fact that all these teachers but one indicated a desire to have the service of an aide again for the following year. In spite of the atmosphere conducive to enhancing self-concept, some teachers did have misgivings relative to what would happen to these children when they were cast into larger classes. It was believed that

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[1] Journal of Instructional Research and Program Development, Volume 2, Number 1. (See chapter on self-image.)

some pupils may learn to expect individualized attention which in turn may act as a detriment to adjustment in classes of normal size where such attention is not possible. Some kindergarten and first grade teachers who had pupils who were previously enrolled in small class situations did indicate that many of these children faced some unusual adjustment problems but that these problems did not persist for very long.

Objective 2: To Provide Certain Nutritional Needs and Mental and Physical Health Services

Relative to nutritional needs, lunches were served in all three components and in addition, snacks were served when the children arrived in the morning.

Medical and dental needs were provided in the Head Start follow-up component. Following the health examinations, given to the Head Start pupils in the summer of 1965, children with medical or dental needs were red tagged; the intention being to provide these services during the following (kindergarten) year. The records of these Head Start children were sent to the individual schools to be followed up by the health personnel working in the local school. The Cincinnati Health Department worked closely with the public schools both in identification and remediation of defects.

Records of medical services given were to be kept by an Internal (record) Exchange clerk. This job never did materialize and consequently central records of medical services were not available. Such records are available, however, in the individual schools. A report of health services given is now being compiled from school records.

The dental program which operated in the dental clinics did keep records of their services. They served 520 of the 1655 children in their follow-up program. The remaining children did not need dental service.

Objective 3: To Develop Cognitive Skills which are Assumed to be Present by the Time Children Reach the First Grade

Pre-Kindergarten. The results of the total pre-kindergarten goal card are seen in table 1. For comparative purposes, three sets of children were tested with the goal card: ESEA classes which started in February and continued through July; several OEO classes which were in session for a full school year; and also beginning kindergarten children in three typical suburban schools. It should be noted that the suburban kindergarten children were tested in September or approximately three months after the ESEA and OEO children who were tested at the end of June. Thus, comparisons may not be viewed in a consistent manner with respect to age. While the mean ages of these three groups was not determined, it seems reasonable to assume that the suburban beginning kindergarteners were approximately three months older when they took this goal card in comparison to either ESEA or the OEO classes. During this three month differential, normal maturation may account for some of the developmental status that is measured on this goal card.

For the purposes of this section, parts B, D, E, F, G, H, and I of table 1 are considered some of the cognitive skills which are presumed to be present by the time a child reaches kindergarten. The indices shown in table 1 represent ratios of per cent of correct responses by suburban children to similar per cents for ESEA and OEO classes. When these indices reach 100 or above, it indicates that the performance of the ESEA or OEO classes was equal to or higher than that of the suburban children.

Taking the seven subtests as a whole, the increase from pre-test to post-test for the pre-kindergarten ESEA classes ranged from 7% for Identification of Parts of Body (which was very high initially) to a high of 27% for Concepts of Shape. All of these increases were made within a four month period of time. Skill in Counting was least well performed at the pre-test level and continued to be lowest at the post-test level.

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes.

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
Scoring Key: 1 poor; 2 acceptable; 3 exceptional						
A. Physical Coordination: Performance judged by teacher using set criteria.						
1. Throw ball	2.31	2.56		2.83		2.80
2. Bounce ball	2.15	2.45		2.60		2.63
3. Walk balance board	2.32	2.50		2.52		2.52
4. Jump rope	1.56	2.06		1.80		1.50
5. Pedal tricycle	Insufficient data			----		----
6. String beads	2.52	2.94		2.96		2.75
Average	2.17	2.50	102	2.54	104	2.44
Scoring Key: Percent Performing Task Correctly						
B. Identification of People and Things: Pupil asked to point to body or picture and identify:						
7. eyes	92%	100%		99%		98%
8. nose	93	100		100		98

(Continued)

(1) Instructed from February to July but tested in June, one month before classes ended.
(2) Instructed from September 1965 to June 1966 or approximately 10 months.
(3) These pupils were beginning kindergarten pupils in three suburban schools and did not participate in the pre-kindergarten program.
(4) This index is the ratio of the suburban criterion means to the corresponding June means of ESEA or OEO classes, multiplied by 100.

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
B. (Continued)						
9. head	91	100		100		95
10. ear	93	98		99		99
11. neck	89	96		98		99
12. mouth	96	100		100		99
13. arm	88	100		95		97
14. leg	88	98		100		97
15. hand	87	95		100		97
16. finger	98	100		99		98
17. hair	93	100		99		98
18. foot	89	99		99		96
19. knee	84	93		92		97
Average	91	98	100	98	100	98
20. mother	83	97		96		98
21. sister	85	94		94		97
22. father	89	96		99		98
23. brother	85	98		100		94
24. doll baby	76	90		87		99
Average	84	95	98	95	98	97
25. fireman	48	66		73		89
26. nurse	87	98		100		99
27. farmer	50	57		80		92
28. mailman	40	54		51		60
29. policeman	45	58		62		72
30. doctor	71	76		78		92
Average	57	68	81	74	88	84

(Continued)

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

	ESEA Classes(1)			OEO Classes(2)		SUBURBAN Classes(3)
Tested Qualities and Directions	Pre-Test Criterion Score Feb., 1966 N=115	Post-Test Criterion Score June, 1966 N=111	Index(4)	Criterion Score June, 1966 N=76	Index	Criterion Score Sept., 1966 N=177
B. (Continued)						
31. moon	17	37		37		83
32. stars	35	51		36		77
33. sun	46	60		60		90
34. rain	68	74		88		86
35. snow	54	67		72		73
36. clouds	56	62		70		73
Average	46	59	74	61	76	80
37. grapes	82	97		93		93
38. banana	88	98		99		98
39. apple	84	97		99		98
40. potato	56	74		76		86
41. carrot	68	88		91		95
42. peas	60	86		83		91
Average	73	90	96	90	96	91
43. rabbit	90	99		99		96
44. fish	89	98		96		96
45. turtle	87	98		99		98
46. squirrel	78	98		94		98
47. lion	72	88		94		78
48. elephant	77	92		96		95
Average	82	96	102	97	103	94
49. doll	88	97		99		98
50. ball	55	82		90		76
51. top	64	83		92		94
Average	69	87	98	94	106	89

(Continued)

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Schools.

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	ESEA Classes(1) Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	OEO Classes(2) Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
C. Auditory Discrimination: Teacher names two pictures asks pupil to point to one. (House-Mouse-Point to Mouse)						
52. mouse	95	98		100		98
53. bear	86	98		97		96
54. tomato	66	83		91		82
55. kitten	89	95		97		95
Average	84	94	101	96	103	93
D. Concepts of Size: Teacher has 3 blocks same shape different weight and size.						
56. biggest	76	93		99		99
57. smallest	49	57		68		77
58. lightest	39	27		43		42
59. heaviest	65	82		93		92
Average	57	64	83	75	96	78
E. Concepts of Color: Teacher has 3 color cards. Asks pupil to tell color.						
60. red	70	80		86		91
61. blue	41	60		68		81
62. yellow	32	62		85		84
Average	48	67	79	80	94	85

(Continued)

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1)			OEO Classes(2)		SUBURBAN Classes(3)
	Pre-Test Criterion Score Feb., 1966 N=115	Post-Test Criterion Score June, 1966 N=111	Index(4)	Criterion Score June, 1966 N=76	Index	Criterion Score Sept., 1966 N=177
F. Manipulation of materials: 5 piece gingerbread man.						
63. five piece puzzle	61	94	95	100	101	99
G. Arithmetic Skills: Teacher asks pupil to take a certain number of objects from box.						
64. Count 1-5	57	73		87		76
65. Count 6-10	17	41		39		43
66. Rote count 1-20 (pupil counts aloud)	7	20		17		41
Average	27	45	85	48	91	53
H. Concepts of Location and Space: Teacher asks pupil to point to the picture.						
67. squirrel under board	83	94		97		93
68. airplane in air	69	85		89		84
69. bird out of cage	86	97		97		96
70. boxes that are closed	66	85		89		83
Average	76	90	101	93	104	89
I. Concepts of Shape: Teacher asks pupil to point to the picture of the figure that is the same shape (3 choices).						
71. △	66	90		95		97

(Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
I. (Continued)						
72. ○	66	93		97		95
73. ▭	61	91		94		94
Average	64	91	96	95	100	95
J. Listening Skills: Teacher reads sentence asks pupil to point to correct picture.						
74. boy and dog	93	92		96		99
75. girl putting ball in box	69	92		96		92
76. truck stopped at traffic light	47	76		67		80
Average	70	87	97	86	96	90

Scoring Key: 1 seldom; 2 occasionally; 3 usually; 4 frequently; 5 always

Observed Qualities: Teacher evaluates each pupil in the following areas.						
K. Mental Alertness						
77. follows directions	3.26	3.22		3.52		2.87
78. asks questions	2.58	2.97		2.80		2.36
79. listens	2.98	3.28		3.07		2.87
80. attentive	3.03	3.35		3.30		2.90
Average	2.95	3.20	117	3.17	115	2.75

(Continued)

Table 1. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
L. Language Ability						
81. speaks clearly	3.08	3.29		3.27		2.89
82. communicates ideas	2.90	3.30		3.20		2.57
83. takes part in discussion	2.73	3.13		2.95		2.37
84. enunciates and pronounces clearly	3.07	3.33		3.15		2.93
85. talks about things he sees	2.58	3.04		3.00		2.32
86. talks about things he does	2.55	3.02		2.98		2.30
Average	2.82	3.19	125	3.09	121	2.56
M. Social Awareness						
87. answers to name	3.89	3.93		4.56		4.10
88. calls others by name	2.51	3.67		4.21		2.26
89. knows belongings	3.83	3.90		4.51		3.72
90. likes to help others	2.47	3.11		3.73		2.58
91. can dress himself	3.36	3.75		4.05		3.60
92. liked by peers	2.85	3.14		3.65		2.86
93. leader	1.95	1.81		2.63		1.93
94. follower	2.34	2.53		2.64		2.40
95. "loner"	1.69	1.87		1.83		1.36
96. waits his turn	2.98	3.10		3.40		2.90
97. hesitates to participate	2.02	1.84		1.73		1.91
98. shares toys	2.63	2.94		3.41		2.96
99. assumes responsibility	2.32	3.00		3.03		2.57
Average	2.68	2.97	110	3.34	124	2.70

This relatively low performance on counting, however, also was lowest for both OEO children and suburban children. The area with the lowest index was that of identifying objects in nature where the index was 74. Inspection of this subtest shows that rain is most readily identifiable, whereas, the moon, stars, and sun are least identifiable. It seems plausible that the latter objects are not seen as well in the inner-city thus accounting for their lack of identification.

The general pattern shows that the ESEA classes answered the items correctly with less frequency that OEO classes who in turn answered items correctly with a smaller frequency than suburban classes. The fact that OEO classes did slightly better than ESEA classes does offer some evidence that their longer duration produced better results. If one accepts the suburban school performance as a criterion measure, it is seen that only five areas show a performance that is less than 95% equal to that of suburban classes. These areas are: identifying service personnel*; identifying objects in nature; concepts of size; concepts of color; and arithmetic skills of counting.

Even though the items described in these seven subtests are only samples of items measuring each concept, it would appear that the attainment of this objective was achieved to a large extent. All of the items represented in these subtest areas were scored in a highly objective manner. Problems of bias in judgment or differences in standards of rating do not enter significantly into these comparisons.

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*The pictures presented in this section of the goal card were printed more clearly on a second printing. Suburban classes had the benefit of the clearer pictures while ESEA and OEO did not. Thus, this comparison is probably not valid.

__Pre-Grade__ __One__. The development of cognitive skills also was an objective of the Pre-Grade One component. A second goal card was designed for use in this component. All 40 classes took this goal card at the beginning of the session in June. One-half of the classes, randomly selected, took the same goal card at the end of the session. Of the 20 classes which were both pre-tested and post-tested, six were in session for six weeks while fourteen were in session for eight weeks. The eight week sessions were connected with Head Start centers which lasted eight weeks; therefore, it was decided to continue the Pre-Grade One classes for the same period. The basic comparisons involved in the evaluation of this component were total group pre-test performance versus post-test performance of the six and the eight week classes. The pre-test performance of six and eight week classes was assumed to be the same since no selection bias was evident.

The goal card results are shown in table 2. The sections pertaining to cognitive and sensory skills are sections B, C, F, M, O, P, Q, and R shown in table 2. Subtest F, counting objects and matching the correct number symbol, showed the greatest increase from pre- to post-test in both six (26%) and eight (35%) week classes. Similarly high increases were made in subtests B and C; concepts of location and space, and classifying objects. The least amount of progress was made in subtests M and Q; recognizing parts of the body and color recognition. The latter is obviously explained by the fact that most pupils could perform the task __initially__ (especially recognizing parts of the body).

Of interest is the fact that the six and eight week classes increased by approximately the same per cents with the exception, perhaps, of classifying objects. On the latter subtest, the eight week classes increased 34% compared to 23% increase for the six week classes. One would expect the eight week classes to gain more than those in session for only six weeks

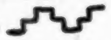
Table 2. Percents
the Pre-Grade One Goal Card.

Tested Qualities and Directions	Pretest Results Total Group(1) June 20 N=728	Post Test Results Six Week Classes(2) July 25 N=101	Post Test Results Eight Week Classes(3) August 8 N=193	Percent Increase Six Week Classes	Percent Increase Eight Week Classes
A. Ability to write first and last name:					
1. Name	7%	25%	18%	18%	11%
B. Concepts of Location and Space. Pupil was asked to mark dog who is:					
2. on	55	84	78		
3. over	53	75	81		
4. under	48	73	76		
Average	52	77	78	25	26
C. Classification and grouping of objects: Pupil asked to identify 2 out of 5 pictures.					
5. toys	33	52	67		
6. furniture	47	77	83		
7. fruit	25	40	51		
8. transportation	47	75	88		
Average	38	61	72	23	34
D. Recognition of letters: Pupil asked to find identical letter or fill in missing letter.					
9. d	21	33	33		
10. e	66	78	88		
11. c	6	18	23		
12. g	3	17	13		
Average	24	37	39	13	15

(Continued)

(1) Total of 40 classes Pre-Grade I starting project June 20, 1966.
(2) Total of 6 classes involved in the project for six weeks ending July 29, 1966.
(3) Total of 14 classes involved in the project for eight weeks ending August 12, 1966.

Table 2. Percents of Correct Item Responses and Increases Made By Six and Eight Week Pre-Grade One Classes on the Pre-Grade One Goal Card. (Continued)

Tested Qualities and Directions	Pretest Results Total(1) Group June 20 N=728	Post Test Results Six Week(2) Classes July 25 N=101	Post Test Results Eight Week(3) Classes August 8 N=193	Percent Increase Six Week Classes	Percent Increase Eight Week Classes
E. Ability to trace pattern: Pupil asked to follow pattern with pencil.					
13. 	41	54	59		
14.	43	58	67		
Average	42	56	63	14	21
F. Count number of objects and match to correct number symbol.					
15. 2	47	74	83		
16. 4	40	68	76		
17. 3	44	68	78		
Average	44	70	79	26	35
G. Recognition of rhyming words (Names of pictures given orally by teacher)					
18. hat - cat	63	90	85		
19. coat - dress	42	54	74		
20. house - mouse	63	86	87		
21. coat - boat	64	81	83		
22. bike - wagon	32	52	69		
Average	53	73	80	20	27
H. Ability to identify and complete a pattern.					
23. △	11	27	30		
24. 000	6	5	24		
25. ◈	25	45	44		
Average	14	26	33	12	19

(Continued)

Table 2. Percents of Correct Item Responses and Increases Made By Six and Eight Week Pre-Grade One Classes on the Pre-Grade One Goal Card. (Continued)

Tested Qualities and Directions	Pretest Results	Post Test Results		Percent Increase	
	Total Group(1) June 20 N=728	Six Week Classes (2) July 25 N=101	Eight Week Classes (3) August 8 N=193	Six Week Classes	Eight Week Classes
I. Recognition of beginning sounds: Circle word having same beginning sound as--					
26. ball	17	43	43		
27. red	22	49	37		
28. car	17	30	44		
Draw line from letter (b) to picture that starts with sound (b)--					
31. ball	8	25	45		
32. top	6	27	35		
33. sun	6	32	33		
Average	13	34	40	21	27
J. Relating picture to written word:					
29. cookies	5	19	30		
30. milk	3	12	20		
Average	4	16	25	12	21
K. Matching number symbol to correct written word:					
34. one	6	32	27		
35. two	4	30	27		
36. three	4	22	26		
Average	5	28	27	23	22
L. Ability to give full name, address, birthday verbally:					
37. name	88	96	97		
38. address	48	73	62		
39. birthday	23	31	31		
Average	53	67	63	14	10

(Continued)

Table 2. Percents of Correct Item Responses and Increases Made By Six and Eight Week Pre-Grade One Classes on the Pre-Grade One Goal Card. (Continued)

Tested Qualities and Directions	Pretest Results Total Group(1) June 20 N=728	Post Test Results Six Week Classes(2) July 25 N=101	Post Test Results Eight Week Classes(3) August 8 N=193	Percent Increase Six Week Classes	Percent Increase Eight Week Classes
M. Recognition of parts of body: Pupil asked to point to the correct body part.					
40. fingers	98	99	97		
41. elbow	82	93	94		
42. knee	96	99	97		
Average	92	97	96	5	4
N. Ability to make a sentence from three words:					
43. boy, girl, dog	16	48	36	32	20
O. Ability to count objects aloud:					
44. 5	67	81	85		
45. 10	49	68	66		
Average	58	75	76	17	18
P. Ability to count by rote:					
46. 1 to 25	42	59	55	17	13
Q. Recognition of colors: (Teacher shows color cards)					
47. orange	82	88	88		
48. purple	68	72	81		
49. yellow	82	86	88		
Average	77	82	86	5	9
R. Identification of objects by touching and smelling: (Teacher blindfolds child)					
50. feel - apple	87	93	87		
51. feel - sponge	53	69	72		
52. feel - fur	23	38	44		
53. smell - perfume	72	94	84		
54. smell - onion	61	81	75		
55. smell - orange	73	74	81		
	[illegible]	75	74	13	12

out perhaps the additional curricular emphasis was not measured on these subtests.

In judging the attainment of this objective for the Pre-Grade One component one must ask, "How much of an increase is considered good?". Further, in the absence of comparable (control) or normative data, one cannot assert with confidence that the gains shown were a result of this summer program, although this hypothesis seems very plausible. The project staff should give some thought as to the level of criterion performance they believe is necessary. Only in this manner, can the aims of the project be assessed relative to their attainment.

Objective 4: To Increase Language Facility

Pre-Kindergarten. Subtest L in table 1 (page 21) represented an attempt to measure language facility through teacher ratings. Reliable and valid measurement of language facility is difficult to make at early ages. The method used was to ask the teacher to rate the child on his ability to speak clearly, communicate ideas, take part in discussion, enunciate and pronounce clearly, talk about things he sees, and talk about things he does. These six items were rated on a five-point scale ranging from one (seldom) to five (always). The theoretical midpoint is 3.0. Averaging the pre-test ratings for ESEA classes showed a mean of 2.82 whereas the post-test mean ratings for the same ESEA classes was 3.19; a statistically significant increase of .37.

Of interest, however, is the fact that the post-test measures of ESEA classes exceeded the ratings of OEO classes which in turn exceeded the ratings of suburban classes. The ratings given to suburban children are consistently lower on all six items as compared to ESEA or OEO classes; the latter two classes showing statistically non-significant differences. This fact raises some questions about the validity of the ratings. Numerous studies show that the most distinguishing characteristic of disadvantaged children is their relatively poor language ability. Standardized tests given locally bear this out. In all probability, the suburban kindergarten teachers rated children based on standards of performance which are probably higher than those used by teachers of ESEA or OEO classes. This would account for the lower means of suburban children as compared to the latter two groups. Comparison with suburban classes, therefore, must be considered ambiguous, although the possibility should not be overlooked that the curriculum emphasis on language development does have high pay-off value. The important finding is the fact that the same ESEA (and OEO) teachers rated the same children higher on these criteria after the program than before.

Pre-Grade One. The approach used to measure language facility in the pre-grade one classes was to ask the children to recite their full name, address, and birthdate (subtest L, page 26) and to recite a sentence using three words (subtest N, page 27). The former criterion probably measures memory more than language facility.

As expected, a high percentage of these children were able to recite their names. Recitation of address and particularly date of birth were much more difficult as about 7 out of 10 could perform the former and only 3 out of 10 the latter on the post-test. Six and eight week classes, on an average, performed about equally well each showing about a 10% increase on these three items.

Constructing a sentence from three words proved to be one of the most difficult subtests. Only 16% of the children could do this on the June pre-test. Significant increases were made, however, as 48% of the six week and 36% of the eight week classes performed this task correctly on the post-test. This represents increases of 32% and 20% for six and eight week classes, respectively.

While there are limitations in measuring this objective as well as ambiguities in interpretation, it does appear that gains are made consistently.

Head Start Follow-Up. Increases in language facility of these classes was not measured directly. Of interest, however, is the fact that a questionnaire given to kindergarten teachers (with aides) revealed that they spend a higher proportion of time on language development than on such things as numbers, science, creative or outdoor activities, housekeeping, etc.

Objective 5: To Develop Listening Skills

Pre-Kindergarten. Two subtests on the goal card (table 1) are pertinent: subtest C (page 18), auditory discrimination; and subtest J (page 20), listening skills. The ability to discriminate between rhyming words was initially high (84%) and post-tested even higher (94%). ESEA, OEO, and suburban classes did about equally well on these tasks.

Subtest J required the pupil to listen to a sentence and point to an object in a picture, to which the sentence refers. Correct responses to this set of items also were very high (about 9 out of 10 pupils on the post-test). Similar to the auditory discrimination subtest, there was no appreciable difference among ESEA, OEO, and suburban classes.

Pre-Grade One. Two subtests on this goal card (table 2) are also pertinent. Subtest G (page 25) asked pupils whether or not two words rhyme and subtest I (page 26) asked pupils to identify beginnining sounds of words.

In the rhyming test, two nouns with pictures depicting them, were spoken to the child who was asked whether or not they rhymed. Only 53% could identify the rhyming words on the pre-test although post-test results did show high gains in both the six (20%) and eight (27%) week classes.

In subtest I (page 26), Recognition of Beginning Sounds, one of the lowest average per cents (13%) was obtained on the pre-test. The six week and eight week classes obtained averages of 34% and 40% on the post-test, increases of 21% and 27%, respectively. Performance was lowest on items 31-33 in which the children had to match the correct printed letter with the correct picture, after the teacher had given the letter and sound orally. They performed much better on items 26-29 in which the teacher said two words aloud, then gave a third word and asked the child to mark the word with the same beginning sound.

Objective 6: To Develop Desirable Social Skills Through Experience in Group Living

Pre-Kindergarten. In subtest M (page 21), Social Awareness, on the pre-kindergarten goal card (table 1), there were 13 items that could be considered as indicators of a child's degree of social awareness. The teacher was asked to rate the child on these items on a five-point scale ranging from one (seldom) to five (always). The pre-test ratings for ESEA classes showed a mean of 2.68 and a post-test mean rating of 2.97, an increase of .29. The OEO classes had a mean rating of 3.34 and the suburban classes 2.70. Valid comparisons among ESEA, OEO, and suburban classes, however, cannot be made. The fact that the ESEA and OEO classes were evaluated by the teachers after four and nine months, respectively and the suburban classes after one week prohibits any valid comparison of the data. Again, the important fact is that these classes did show a significant rating increase.

Head Start Follow-Up. Do children who had the benefit of the Head Start program show more progress than non-Head Start children? While this question is not concerned with this ESEA project, it is pertinent. Children in the summer 1965 Head Start program were followed through the first semester of kindergarten (January 1966). Their report card marks which mainly reflect social skills, were compared with non-Head Start pupils in the same schools.

Kindergarten teachers were not informed of the study until after marks were given thus no intentional bias in marking pupils is likely. The marks of 1269 former Head Start pupils and 2068 non-Head Start pupils were compared in each of 17 behavioral areas indicated on the report card. Since pupils are marked S (satisfactory) or N (needs improvement), comparisons of the per cents of S marks were made and tested for significance by chi square.

None of the 17 differences between Head Start and non-Head Start pupils was statistically significant. To obtain an idea of what kindergarten teachers believe to be the relative strengths and weaknesses of their pupils, table 3 presents the 17 behavior areas marked in rank order from most to least satisfactory.

Inspection of table 3 shows wide differences in the proportion of satisfactory marks ranging from 47.8% for "uses materials well" to 92.7%, "interested in stories and books." Several interesting observations can be made. For example, about 91% were rated S in "shows interest in materials" whereas only about 48% were satisfactory on "uses materials well." One may infer from this that while these children have interest in objects, their ability to use them properly is poor, probably because of their lack of experience with such materials in the home. It is also interesting to note that only about 52% of these children are rated satisfactorily on "expresses ideas well." It appears that poor language ability, which is evidenced throughout all grades on standardized tests, is apparent also to kindergarten teachers.

The fact that the marks of summer Head Start pupils were not significantly better than those of non-Head Start pupils should not be construed to mean that the Head Start program was ineffective. Perhaps it is more important to demonstrate that the marks of Head Start pupils were not significantly worse, since Head Start pupils were selected on the basis of their coming from the most economically deprived families.

Table 3. Proportion of Kindergarten Pupils* in Target Schools Receiving "Satisfactory" Report Card Marks at First Semester in each of Seventeen Behavioral Areas.

Behavioral Area	Per Cent of "S" Marks N=3337
Interested in stories and books.	92.7%
Takes care of personal appearance.	92.3
Shows interest in materials.	90.7
Takes part in rythmic and play activities.	88.0
Is thoughtful of others.	80.2
Takes part in music activities.	78.9
Sits, stands, walks correctly.	78.7
Keeps objects from mouth.	76.7
Works and plays safely.	75.0
Tries to do his best.	71.8
Finishes work.	67.7
Works quietly.	64.1
Works well on his own.	58.0
Takes part in group discussion.	54.2
Expresses ideas well.	52.0
Listens and follows directions.	50.6
Uses materials well.	47.8

*Includes both former Head Start and non-Head Start pupils. The marks of these two groups were similar in all areas.

Objective 7: To Provide for Parent Education and Increase Parent Involvement.

A separate Title I project entitled "Parent Education"* was devoted to achieving these goals. The latter project staff worked closely with the Early Childhood Education project staff in identifying and encouraging the parents of children. The chief focus of the project efforts was in helping parents to understand their children and themselves, and to become more involved in the education of their children through a realization of the importance of their own parental role. To achieve these goals one paid leader was selected from the parents in each school area. These leaders were given intensive training that included general leadership development, instruction in planning and conducting discussion programs, information on cultural and educational opportunities offered by the community and training in the use of resources and agencies.

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*Limited copies of this project's evaluation are available from the Division of Program Development, Cincinnati Public Schools.

In all, this training was given to parent leaders representing 32 of the 40 target public schools. By publicizing the project and contacting parents in their homes, these leaders involved a total of 1626 parents in one or more study-discussion programs. Average attendance for each session included about half the parents who had been enrolled from the area. Most of these were parents whose children were enrolled in the Early Childhood Education project.

Responses on the Parent Participant Survey and oral reports of parent leaders point to many worthwhile gains in parents' relationships with children and school and understanding of themselves and their role as parents. No comparisons of pre-post project gains were possible except for the Teacher Survey, where target school teacher ratings indicated some improvement in parent-school relationships. For further information the reader is referred to the evaluation report of the Parent Education project.

Objective 8: To Develop Skills Considered Necessary for Reading Readiness

Pre-Grade One Component. The children who participated in this component were selected on the basis of their poor performance on the Metropolitan Reading Readiness Test, Form A, administered in May of their kindergarten year. The mean raw score for a sample of 246 pupils was 26.53 which is equivalent to the 9th percentile based on the performance of the national norm group.

Six subtests on the pre-grade one goal card (table 2) can be considered as measuring the development of skill needed for reading readiness. These subtests are: A, writing first and last name; D, recognition of letters; E, ability to trace a pattern; H, ability to identify and complete a pattern;

J, relating a picture to the written word; and K, matching number symbol to written word. As a group, these six subtests were difficult in comparison to the remaining 12 subtests. The lowest pre- and post-test performance was on A, J, and K. Gains on all subtests, however, were apparent. For both the six and eight week classes these gains ranged from 11% to 23%. In general, eight week classes did better than six week classes.

Table 4 shows the pupils' performance on the Metropolitan Reading Readiness Test, Form A. This test was administered in kindergarten in May, 1966 to most of the children who entered the pre-grade one classes in June. At the close of the six week and eight week classes, six of the classes in the six week course and 14 of the classes in the eight week course (50% random selection of classes) were administered the Metropolitan Reading Readiness Test again. Pupil gains were studied.

Table 4. Pre- and Post-Test Results on the Metropolitan Reading Readiness Test Given to Pre-Grade One Classes in Six and Eight Week Sessions.

	Six Week Classes N=89		Eight Week Classes N=157	
	Raw Score	Percentile	Raw Score	Percentile
Pre-Test (May)	25.93	8	27.56	9
Post-Test				
(July)	34.82	15		
(August)			33.49	14
Gain from May	8.89		5.93	

Table 4 shows pre-test achievement equivalent to under the 10th percentile with respect to national norms. Post-test scores increased significantly to the 15th and 14th percentiles for six and eight week classes, respectively.

Whether or not the increases in performance on both the Goal Card and the Readiness test can be considered due to the pre-grade one program or normal maturation can be questioned. A previous study, conducted in the Cincinnati Public Schools on summer loss, indicated that the summer non-school environment had either a neutral or depressing effect upon achievement gain of disadvantaged pupils.* There is some reason to believe that had not these pupils enrolled in the pre-grade one classes they may have been less well prepared for the first grade program.

Head Start Follow-Up. Pupils who enrolled in the summer 1965 Head Start program were followed through their kindergarten year. In the spring of their kindergarten year, all children are given the Metropolitan Reading Readiness test. It was hypothesized that summer Head Start pupils would perform better on these reading readiness tests than comparable students who had not enrolled in Head Start. Unfortunately, such comparisons could not be made without possible bias since Head Start pupils were selected from among a larger population of pupils and an adequate control group could not be identified. Head Start pupils were selected primarily on the basis of their low family income status. Based on this factor, one would expect these pupils to have less reading readiness in general than non-Head Start pupils. On the other hand, parental consent to enter the Head Start program was required and such an expression of interest in their children probably is a bias in favor of the Head Start child. In the opinion of the writer, comparisons of readiness scores generally would show a bias in favor of non-Head Start pupils.

Raw score distributions of Metropolitan Reading Readiness scores were made for 1202 former Head Start pupils and 2045 non-Head Start pupils who were located in the same set of schools in which Head Start centers were located. Comparisons of scores at various percentile points in each distribution were made. These results are shown in table 5.

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*Journal of Instructional Research and Program Development, Volume 1, Number 1, p. 19.

Table 5. Metropolitan Reading Readiness Raw Scores at Selected Percentile Points for Former Head Start and Non-Head Start Children at the End of their Kindergarten Year.

Percentile Point	Former Head Start Children N=1202 (1)	Non-Head Start Children N=2045 (2)	Difference (1-2) (3)
P_{90}	58.53	60.35	-1.82
P_{75}	51.62	53.06	-1.44
P_{50}	43.29	43.98	- .69
P_{25}	34.11	33.77	+ .34
P_{10}	25.81	24.34	+1.37

Before table 5 is interpreted it should be borne in mind that only two plausible hypotheses are involved in these comparisons, i.e., that former Head Start pupils may show a level of readiness equal to or higher than that of Head Start pupils as a result of the Head Start program. It is not plausible that Head Start would decrease readiness. Thus, any comparisons in which non-Head Start pupils are significantly higher than Head Start pupils must be attributed to a selection factor and not to any intrinsic aspect of the Head Start program. The only issue at stake is whether the Head Start program showed a positive difference or not.

Inspection of table 5 shows that the differences at the five percentile points represent a definite trend of the lower ability pupil being favored by being in the Head Start program. At P50, P75, and P90, the differences show the non-Head Start pupils to be higher than Head Start pupils but again these differences must be attributed to initial superiority of these pupils and not to the non-Head Start program being superior to the Head Start program.* Unless one is willing to assume that the lowest 10% of the Head Start group was initially less capable than the non-Head Start group, an assumption which does not seem plausible, it would appear that the Head Start program did result in a higher level of readiness for the lowest 10% of the pupils (difference = +1.47) and to a somewhat less extent for the bottom 25% (difference = +.34). If it were possible to equate the two groups initially or assess the extent of bias, the differences in readiness at all five percentile points may have favored Head Start. Based on these data, this issue must be left unresolved.

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*It should be remembered that for the most part these two groups were mixed in kindergarten and therefore, subjected to essentially the same kindergarten curriculum.

Recommendations

1. Assuming the validity of the measurements made in this project, it would seem highly desirable to continue these types of efforts in better preparing disadvantaged children for school. The underlying principle of the need for early intervention seems to be supported by the evidence obtained in this project.
2. Since the main focus of this project was to develop readiness for first grade work, it is essential that empirical studies be identified or made to determine precisely those activities that are needed to create readiness for first grade work. In determining these activities, one also validates the goal card instruments used in this study relative to the degree to which they are measuring readiness.
3. Of all the Early Childhood Education components involved in this project, it is believed that one year of instruction previous to entering kindergarten is most likely to be of educational benefit to disadvantaged children. Pre-grade one and Head Start classes are viewed as stop-gap measures to achieve readiness. Such summer programs, while valuable, cannot replace a full year's program with children at younger ages.

4. Additional ways of achieving reading readiness should be explored through the use of such programs as the Frostig Perceptual Development program.
5. There should be continuous study and evaluation of the many new teaching materials and teaching aids that may help significantly in the instructional program.
6. It is apparent that kindergarten and first grade teachers need to adjust their levels and modes of instruction to the differences in previous training that children might have received. To do this they must be knowledgeable of the previous instructional programs of their children. This is a difficult task in view of the varieties of programs to which these children might have been exposed.

Summary and Conclusions

The Early Childhood Education project consisted of three components: pre-kindergarten classes which met for approximately five months from February to July; the pre-grade one component which was a six or eight week summer program; and the follow-up Head Start component which took place in kindergarten and gave services to children who were enrolled in the 1965 summer Head Start project. In general these three components aimed at developing a readiness for first grade work. Goals of this project consisted of mainly developing cognitive skills, attending to the mental and physical health of the children, developing listening and social skills, and securing a more favorable commitment of parents to their child's education.

Based on the evaluative evidence, the following conclusions seem warranted:

Pre-Kindergarten

1. Significant gains were made by pre-kindergarten children from February to June as measured by the pre-kindergarten goal card.

Taking those tasks on the goal card that could be scored as "performed" or "non-performed" it was found that the average of these items on the pre-test was 66% in February and 82% in June. This represents a 16% increase.

2. Pre-kindergarten classes compare favorably in their performance on the goal card with beginning suburban kindergarten children. Relative to suburban classes these children performed least well in identifying objects in nature and identification of colors. On the latter subtests project children were under 80% of the performance of suburban classes while on all other subtests they were above 80%.
3. In general, pre-kindergarten classes meeting for a full year (funded under OEO) performed better on the goal card than ESEA classes which met for approximately five months.

Pre-Grade One

4. Children in pre-grade one classes made significant gains over the duration of this project. The mean per cent of correct responses made on the pre-test goal card was 41% as compared to a post-test mean of 58% for the six week classes and 60% for the eight week classes.
5. Similar to pre-kindergarten classes there is evidence that the longer the duration of the program the better the results. The tasks that seem to need the most attention are: relating picture to written word; ability to write first and last name; matching number symbol to correct written word; ability to identify and complete a pattern; and recognition of beginning sounds. The tasks that are relatively best performed are: recognition of parts of body; recognition of colors; concepts

of location and space; recognition of rhyming words; and ability to count objects aloud.

6. There is some question as to whether the pupils in this project do indeed have a poor self-concept. Perhaps the self-concept of these pupils, rather than being poor, is simply a matter of being different from that concept as viewed by teachers.

Head Start Follow-Up

7. Report card marks given to first semester kindergarten children were similar for former Head Start and non-Head Start children. This finding could be construed to be favorable to the Head Start program since these children, in general, were from families with lowest incomes.

8. There is evidence to believe that reading readiness can be favorably influenced by the Head Start program. The lower quarter and particularly the lowest 10% of Head Start children showed a higher readiness score than the corresponding group from the non-Head Start population.

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SPEECH IMPROVEMENT

Introduction

There is a large number of children in the Cincinnati Public Schools whose speech patterns are substandard when compared with the speech standards set by society-at-large. Many of these children are able to communicate in their own environment. However, when they are required to move from their immediate environment into the larger community, their speech sets them aside as being different and often limits their opportunities.

Substandard speech is defined as speech which markedly varies from the speech used by the community-at-large. It is speech which tends to call unfavorable attention to the speaker when he moves out of his immediate environment into the community-at-large, because at this point it interferes with effective communication. It is characterized by:

1. Sound omissions, substitutions, and additions.
2. Inappropriate syntax, limited vocabulary and incorrect word usage.
3. Inappropriate enunciation, accent, voice and melody patterns.

The purpose of the program for speech improvement is the remediation of the substandard speech patterns of children enrolled in six primary target schools and teachers in all target schools who wish to improve their oral language skills.

Objectives

The project objectives as originally proposed were as follows:

1. Determine the nature of and the extent to which substandard speech is used in selected disadvantaged schools.
2. Institute programs designed to remediate the substandard speech patterns of the children, teachers, and parents involved.
3. Evaluate the effectiveness of the remedial speech program.

Project Narrative

The Speech Improvement Project began on February 8, 1966 with the employment of a project director and a speech consultant. Six primary target elementary schools were identified to participate in the program:

Hays	Sands
Washburn	Windsor
Millvale	Garfield

One of the first tasks of the project director and consultant was to make numerous tape recordings of the oral language of children and teachers in the six target schools. These language samplings were evaluated in order to identify the specific language errors characteristic of the children in these schools. In addition to planning remedial procedures to be used, early attention was given to project evaluation. Considerable time was spent in recording children's oral language for subsequent evaluation of the project.

Basic equipment proposed to operate the project included: ten tape recorders, three phonic mirrors, six listening posts and three language masters. Listening posts and language masters, however, were not available.

Small Class Instruction for Pupils. It was not until April 26, 1966, that the project staff was ready to begin small group instruction. It was decided to meet with the children for twenty minute periods three times weekly, for a period of four weeks. While the project staff recognized that instruction over such a short period of time would not likely bring about significant change in the children's language, it was believed that this instruction would serve as a trial for the work to be done during the following project year. Only children in kindergarten, grade 3 and grade 6 were given small class instruction. The reason for this was to determine at which age levels small group instruction would be most effective. A total of 75 pupils was selected: 25 in kindergarten, 25 in grade 3, and 25 in grade 6. These pupils were identified through tape recordings made of all involved pupils in the three grades within the six target schools. Pupils who seemed most in need of oral language improvement were selected.

Following the pre-treatment recordings and selection of children to be served, lesson plans were written. Since there were no resource books or curriculum guides for reference, this task required a large block of time. Although an analysis of the tape recordings indicated the errors which had to be attacked, the means of this attack had to be decided. Twelve lesson plans were written for each of the three grade levels involved, i.e., kindergarten, grade 3 and grade 6.

The first kindergarten lessons included an evaluation of auditory discrimination and memory span. Gross sound testing was refined to the point of asking children to discriminate between bells of different pitch. Pupils were asked to identify sand and thumb tacks in two small enclosed boxes by listening to the sound. These tasks were presented as games. Pupils were instructed to repeat the number and rhythm of hand claps. They were also given a sequence commission test of four verbal commands.

Upon completion of more lessons involving gross sounds, pupils were taught the concept of sound. Teaching this concept required three or four twenty-minute sessions. Children made sounds, talked about how we hear noises, identified sound making objects in a picture, and discussed sounds our voice can make. Succeeding lessons covered the expanded concepts of loud and soft sounds.

At the beginning of each class the children were given a free period of five minutes, which they spent looking at books and other objects in the room as well as getting to know one another. They were allowed to make tape recordings about whatever they chose with the help of the consultant.

The lessons for third and sixth grade pupils began with similar evaluation procedures. Testing was more extensive since non-sequential numbers and words as well as hand claps were given to test the memory span. The auditory discrimination test was more refined for these older pupils. A test of 21 sentences with errors in grammar and pronunciation was included. In addition, an articulation test was given. Five lessons were devoted to an explanation and teaching of listening skills. Additional games were used to help the children develop this acuity.

Listening was discussed as the forerunner of speech in an attempt to correlate listening skills with speech. Several lessons stressed listening to a word in order to determine if the entire word had been said. Work was done also on root words and word endings. Pre-recorded words and sentences were especially beneficial in this regard.

It was believed that the sixth grade lessons were most adequate and suited the language needs of the pupils. Third graders were able to benefit from some of these lessons when presented at their reading level. Although the written selections were chosen from third grade texts, the children had difficulty reading them. Third grade reading level was appropriate for the sixth graders, but too difficult for the third graders. Kindergarten lessons probably would have been more beneficial had they been more loosely structured with added stress on puppetry and dramatic plays.

Workshop for Classroom Teachers. While the small group instruction was still in the planning stage, the university consultant began conducting teacher workshops. A series of four workshops took place: the first and third were joint staff meetings for every teacher in the six target schools; the second and fourth were only for representatives from these schools.

The university consultant devoted the first workshop to an explanation of the way in which children develop receptive language and the teacher's role in this development. In the smaller workshops following this first meeting, teachers were shown appropriate film strips, books, and games which are all readily available within the school system. Expressive language was the theme of the third workshop. Methods of evoking speech from children and the ways to improve this language were discussed. The fourth meeting was very much like the second with an informal display of appropriate visual aids and suggestions for the use of instructional games.

The workshops were, as a whole, somewhat disappointing. They were held at the end of the school day, a time when teacher motivation and interest are not usually at their peak. Some teachers suggested that they would have preferred to work in smaller groups as to be able to talk directly, with the consultant.

Personal Speech Improvement for Teachers. Five sections of speech improvement for teachers were opened. Ten classes were held on successive Thursday evenings. While 46 teachers applied for the course, only 40 were finally accepted. Teachers were not enrolled if all they wanted was a methods course in language of disadvantaged children or a public speaking course. Only those teachers interested in improving their own oral language skills were enrolled. Of the five sections, one was devoted solely to voice improvement. Teachers enrolled in the remaining four sections sought to generally improve their oral language.

Tape recorders were available to all teachers enrolled in the course. The first five lessons dealt mainly with discriminative listening. It was believed that once the teachers could hear their errors, they could more easily correct them. In most instances, speech errors had to be pointed out. The teachers could hear the difference between "modren" and "modern", for example, only after they had been told of the mispronunciation.

The instructors gave a list of commonly mispronounced words as a part of each lesson for both vocabulary enrichment and pronunciation practice. The teachers were asked to use a dictionary at home to help determine the proper pronunciation and usage of these words.

The International Phonetic Alphabet was also introduced as a visual way of noting vowel and consonant additions, substitutions and omissions. The teachers were asked to learn this alphabet and transcribe certain words as the instructor said them correctly and incorrectly. Some work was done through imitating pre-recorded sentences and phrases to improve voice and melody patterns. This work seemed more abstract and therefore more difficult for the teachers.

It is recommended that less stress be placed on the teaching of the International Phonetic Alphabet in this course next year. While it is an interesting course of study, it is believed that the same results could be achieved more effectively with more stress on oral rather than written approaches.

Evaluation Procedures and Results

Considerable time was spent by the project staff in securing tape recordings of both pupils and teachers in the speech improvement program. These tapes served a dual purpose. They were used, first, to identify pupils to receive small group instruction and, secondly, to serve as one basis for project evaluation. The use of these recordings in evaluation is explained under objective 3 below.

Objective 1: To Determine the Nature of and the Extent to Which Substandard Speech Is Used in Selected Disadvantaged Schools. Analysis of tape recordings and observations in the classroom yielded information about the common types of errors made by pupils in the target schools. The most common types were as follows:

Syntax errors--use of the nominative pronoun as a possessive (Mary took she book home); use of a double subject (Mary she took the book); improper use of prepostions (We went at the store); inconsistent use of s as ending (that costs ten cent).

Omission--dropping of final consonants (t, d, n); dropping or slurring of numerous sounds in medial positions (chaces for chances); omission of one consonant in a consonant cluster (waps for wasps).

Substitution--substitution of b for v (bery much for very much); substitution of f for th (baf for bath).

Distortion--incorrect pronunciation of long I (rat for right); distortion of ow (hal for howl); distortion of short u (tooch for touch); incorrect pronunciation of short e (pin for pen); mispronunciation of ar (Curolyn for Carolyn); distortion of l (insufficient tongue elevation).

Volume--insufficient volume.

Inflection--inappropriate inflection patterns, such as We wont a new sled.

Determination of the extent of substandard speech is a difficult problem since criteria vary widely. However, sufficient evidence was gathered to confirm the contention of the speech improvement team that the speech patterns of the children varies markedly from the speech used by the community-at-large and probably restricts opportunity for the children when they move out of their immediate environment into the larger community.

In this connection it is interesting to note that on the Teacher Survey, administered in all target schools in June as part of the overall evaluation of the Education Act program, "Intelligibility of pupil speech" was rated third lowest of 48 concepts items.*

Objective 2. Institute Programs Designed to Remediate the Substandard Speech Patterns of the Children, Teachers and Parents. This objective was largely procedural. As indicated in the project narrative, direct small group instruction was given to 75 pupils in the target schools for a period of four weeks, with three twenty-minute lessons being given each week. In addition, four workshops for the classroom teacher were presented with the intention of improving children's speech patterns through in-service teacher training. A program of personal speech improvement for teachers was initiated. Forty teachers were enrolled in the course which met on ten successive Thursday evenings, in five separate sections. A speech improvement program designed for the interested parents was not initiated due to lack of project staff.

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* A full description and report of this survey may be found in the Journal of Instructional Research and Program Development, Volume 2, Number 1, 1966.

Objective 3: To Evaluate the Effectiveness of the Remedial Speech Program. Evaluation of the effectiveness of the speech improvement program for pupils was based on pre and post tape recordings of pupils who were classified in one of the four groups (treatments).

Group 1. These children were enrolled in the six selected primary target schools and received direct help in small group instruction. They were instructed in 12 lessons of twenty minutes each, three per week for four weeks. A total of 63 pupils in grades K, 3, and 6 had been tape recorded both before and after the small group instructions.

Group 2. These children, also enrolled in the six selected primary target schools, did not receive small group instructions. The teachers of these children completed the personal speech improvement course for teachers.

Group 3. These children also were enrolled in the six selected primary target schools. The only possible benefits these children may have received relative to speech improvement is that their teachers were participants in the four in-service training sessions conducted for the staffs of the primary target schools.

Group 4. The children in this group were enrolled in primary target schools other than the six that were selected to receive the speech improvement project. Neither the pupils or their teachers were involved in any sort of speech remediation. This group may be viewed as a control group.

The pupils involved in this evaluation were selected after the fact, i.e., they were not placed in treatment groups at random. From a study of the four treatment groups above one can see readily that improvement was expected to be greatest in Group 1, followed by Group 2, Group 3, and finally Group 4, who received no special remediation. Pupils in kindergarten, grade 3 and grade 6 were included in each group in order to determine whether the treatments would be uniformly effective regardless of grade and level. This factor was built into the design to answer the important question of whether such remediation should focus on the younger child or the older child, or whether, indeed, it makes any difference.

Two minute tape recordings of the pupils' voices were made both before and after the project. One part of the tape recording consisted of children naming twenty picture cards. The names consisted of sounds and sound blends which were thought to be difficult for these youngsters. The second part of the tape recording consisted of presenting each pupil with a picture from a multi-ethnic first grade text in which younger pupils were asked to tell what they saw and older ones were asked to make up a story about the picture.

For each child the pre and post recordings were put on the opposite sides of the same tape. At the end of the project period, three teachers of speech therapy were asked to act as judges. Their task was to rate the pupils' speech on a five-point scale based on five factors: intelligibility; accent, voice and melody; omissions, substitutions, and additions; syntax, vocabulary and usage; and enunciation. The criterion score was the median rating of the three judges. Judges were not told which side was the pre or post recording.

The differences between the criterion scores of pre and post recordings were calculated and used as the basis for a two-way analysis of variance of treatments by grade. In none of the five analyses was there a significant difference in either treatment effect or grade level. There was a slight tendency for judges to rate the post-recordings higher than the pre-recordings, indicating in their judgement that slight improvement had been made. This slight improvement, however, was seen equally in all four treatment groups as well as for pupils in kindergarten, grade 3 and grade 6. These ratings, then, give no evidence that the speech of pupils involved in the Speech Improvement project improved more than that of the control pupils.

Another task of the judges was to indicate which side of the tape represented the better quality of speech. Assuming that pupils' speech would generally improve from pre to post recordings, one would expect the judges typically to choose the post recording as having higher quality. Thus, if two or three of the judges selected side A, this was considered the judges' identification of the post recording.

Table 1 . Percentage of Correct of Judges' Identification of Post Tapes

	T^1		T^2		T^3		T^4	
	%	(N)	%	(N)	%	(N)	%	(N)
Kindergarten	62.5	(24)	*	*	59.1	(22)	80.9	(21)
Grade 3	73.9	(23)	77.3	(22)	86.7	(15)	84.2	(19)
Grade 6	75.0	(16)	65.0	(20)	79.2	(24)	76.2	(21)
TOTAL	70.5	(63)	71.15	(42)	75.0	(61)	80.4	(61)

*There were no subjects in this group as no kindergarten teachers enrolled in the personal speech improvement program.

Table 1 shows the percentage of pupils in each grade and treatment whose post recordings were correctly identified in this way. If pupils had neither improved nor deteriorated in their speech, one would expect the identifications to be correct 50 per cent of the time by chance. Although each percentage exceeds this, the differences among grades and treatments show no significance by chi square test. Thus, the judgements for pupils in the T^1, T^2, and T^3 groups were no more accurate than those for T^4 control pupils. In fact, the total percentage correct for the control group is slightly higher than for the other three groups, although this difference is not statistically significant. It should be remembered that pupils were selected for the T^1 group because their speech patterns were most in need of remediation.

Recommendations

From this appraisal of the effectiveness of the Speech Improvement project, a few key recommendations emerge.

1. Continuation of both the small group instruction and the teacher workshops as parts of the project through the next school year. The project objectives should be viewed as long range goals rather than purposes that can be attained in a brief period of time. Plans for achieving these objectives should be made accordingly.

2. Continuing alertness of the project director and other personnel to the possibilities of improving the organization and methods of operation of the project. Decisions such as lessening emphasis on the International Phonetic Alphabet for the sake of increasing use of oral language approaches can make speech improvement services more effective.

3. Extensive project evaluation at the close of the next school year aimed at assessing the appropriateness of methods, organization, pupil selection and similar factors.

Summary and Conclusions

In its original design the Speech Improvement project was aimed at determining the nature and extent of substandard speech, setting up programs to remedy this problem and evaluating the effectiveness of the programs so designed. Beginning late in the 1965-66 school year, the program offered a total of four clock hours of small group instruction to each pupil. Classes ran for four weeks, meeting three times weekly in twenty-minute sessions.

In the short span of the project, recorded speech samplings were used to establish that substandard speech is common in disadvantaged schools and to identify the most common types of speech errors. Pupils with poor oral language skills were offered a limited amount of specialized instruction. In addition, a series of four workshops were held for classroom teachers who wished to improve their oral language skills.

Although this brief period of time was adequate to justify the project and establish a pattern for continuing Speech Improvement services, it was obviously not enough to effect noticeable speech changes in all pupils served. The evaluation of the effect of the instruction on pupils' speech, based upon judges' comparison of pre and post recordings, shows no significant difference for pupils in the project as compared with control pupils.

Nevertheless, the design of the project appears to offer sufficient promise to suggest continuation without drastic changes. If project personnel are alert to signs of success and to indications of the need for change, the program will benefit through continued refinement. It would seem advisable that a very thorough evaluation be conducted at the end of the next school year and possibilities for more pronounced modifications considered at that time.

EMOTIONAL AND LEARNING PROBLEMS

Introduction

The special education needs of two groups of school age children were the focus of the Emotional and Learning Problems project, launched in the 1965-66 school year under the Education Act. First, there are children whose full participation in the educational process is hampered by existing emotional problems. In addition, there are pupils with perceptual learning disabilities that interfere with academic achievement.

For neither category of youngsters has the school system been able to provide adequately in the past. Facilities for approximately 85 seriously emotionally disturbed children have been made available in two residential settings, but many more pupils with emotional disturbances certainly could benefit from educational programs tailored to their needs. According to a 1960 study, Cincinnati teachers consider socially maladjusted and emotionally disturbed children in their classrooms the greatest deterrent to teaching.* Similar concerns were expressed in the Teacher Survey conducted in May and June, 1966.

For children with perceptual learning disabilities, no special facilities or programs have been provided in the past. Although public schools have had considerable experience with these children, little has been done to investigate appropriate ways of effectively educating them. Within the last decade, however, there has been considerable interest on the part of educators and physicians in solving the educational problems of such youngsters. Several pilot programs and some research have been directed toward answering this question.

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* James N. Jacobs and George B. Redfern. "Time for Teaching." Ohio School Board Journal, August, 1960, p. 14.

Within the school system itself, it seemed that both emotionally disturbed youngsters and those with perceptual learning disabilities could be helped by specially designed small group instruction and extensive psychological attention. For the emotionally disturbed, therefore, the project sought to provide for: identification and treatment of the mildly disturbed in their regular school program; resource rooms for their education, guidance and support; special classes for small group instruction; and an expanded residential school program. For the perceptually handicapped, a service team of psychologist, social worker and educators was to be provided, along with small primary level classes for the education of these children.

Objectives

The objectives toward which both classes of service were directed were as follows:

1. To provide adequate educational opportunities for children who might otherwise be denied the privilege of school attendance because of their emotional or learning disabilities.
2. To prevent the deterioration of the learning process of children with emotional or learning disabilities.
3. To rehabilitate children who have emotional or learning problems.
4. To demonstrate the effectiveness of a special educational program in a public school to enable certain children to function outside the confines of a residential institution such as a hospital.
5. To provide opportunities for the re-entry of children from institutional settings into the community through modified classroom programs.
6. To provide opportunities for teachers, psychologists, psychiatrists and others to extend their skills and understandings of children with emotional or learning disabilities.
7. To provide facilities for training teachers to work with children who have emotional or learning disabilities in a day school setting.

Project Narrative

Inauguration. Early in the 1965-66 school year several personnel from the Division of Special Education met with representatives of the Department of Special Services to formulate a proposal for establishing classes for emotionally disturbed children. This proposal ultimately came to include provisions for children with visual and perceptual handicaps as well. It was put into its final format and submitted as an ESEA project application on February 17, 1966. Almost immediately the project was approved by the State Department of Education, effective February 1.

The proposal involved a four level program for emotionally disturbed children:

1. A program of services for the early identification and treatment of children with mild emotional disturbances while they are enrolled in the regular grade programs of their neighborhood elementary and secondary schools.
2. Primary, elementary and junior high school resource rooms for the education, guidance and support of selected mildly emotionally disturbed children.
3. Special units of self-contained classes for selected emotionally disturbed children at the elementary and junior high school level.
4. The expansion of residential school programs for selected seriously emotionally disturbed children.

For the perceptually handicapped, two phases of service were designed to alleviate learning disabilities.

1. Employing a clinical team comprised of a clinical psychologist, two teachers, a school social worker and an educational coordinator to work with school personnel to identify children with learning and perceptual problems.
2. Establishing two primary level classes for children with learning and perceptual problems.

Personnel. The first phase of project implementation was selection and training of personnel required by the project. To train teachers to work with emotionally disturbed children, courses were provided by instructors from Xavier University at the Longview State Hospital and by instructors from the University of Cincinnati at the Child Guidance Home. Eight elementary teachers were released from their regular assignments one day a week to participate.

Classes began February 15 at the Child Guidance Home and February 21 at Longview; they continued for fifteen weeks. Teachers attended lectures and conferences or engaged in observation and teaching for at least nine hours of each of the fifteen days. Thus they gained first hand experience in working with children with emotional disturbances. Five quarter hours of graduate credit for the course was granted by each university.

Considerable difficulty was encountered in employing a competent person to fill the position of educational coordinator for the project. Letters were written to some of the outstanding authorities in special education, and a number of conferences were held with these individuals. Finally a person was selected for this job who had been in full-time study in the special education division of the University of Cincinnati. The coordinator's background included 15 years of elementary school teaching, 13 of which were spent in a small private school which he administered. He also had had some preparation in theories of perception and methods of remediation of perceptual difficulties. Finally, he had had experience in caring for pre-school emotionally disturbed children. The educational coordinator began work on April 4 on a half-time basis.

An even more difficult task was employing the necessary clinical personnel. An attempt was made to organize a complete clinical team of psychiatrist, psychiatric social worker, school social worker, and two psychologists. These persons were to work intensively with pupils and teachers in all phases of project service. It proved impossible, however, to fill these team positions.

Special Classes. Because of the limitations imposed by lack of clinical personnel, it was decided to restrict project activities for the rest of the school year to two experimental classes for the emotionally disturbed. This would provide at least a brief trial period for small-group, concentrated attention on this type of child. Referrals of children to be considered for these classes were made by teachers in one school. The school administrator then met with the local school psychologist, the visiting teacher and the project coordinator, and twelve children were selected for the classes.

Although care exercised in selecting pupils gave some insurance against improper placement, it was made clear that this was an experimental placement and not a diagnosis or classification of any sort. The classes were labeled "in-school tutoring." From a curricular viewpoint the placement seemed at least as beneficial as the regular assignment for these pupils, who had had considerable adjustment difficulties.

The classroom chosen to house the class for emotionally disturbed children had to be remodeled to suit the needs of the group. The following classroom furniture and materials were requisitioned early in April.

16 pupil desks
6 pupil tables
12 pupil chairs
2 teacher desks and chairs
Reading work-texts and labs
Arithmetic work-texts
Science and Social Studies readers
Activities materials
Art materials
Puzzles and games
Miscellaneous supplies

Immediate shipment was received on materials ordered from the warehouse and on all classroom furniture except teachers' desks. The curricular materials, special supplies, and large equipment, however, weren't received during the time classes were in session.

Classes were officially begun on May 2 by the transfer of two teachers from their previous assignments. Pupils were introduced to their classes two at a time on a half-day basis in the first week. After this introductory period, they spent the whole day in the classes.

Much of the potential effectiveness of the small group instruction was lost because specially selected materials were not received. The two teachers used a variety of exercises and motivational aids that had been reproduced locally. Planning an instructional approach that would keep the pupil as engrossed as possible, they strove to remain alert to each pupil's particular needs.

Behaviorally, the pupils regressed to open display of hostilities. To accomplish their own ends, they used many forms of manipulative behavior, pitting classmates against one another and against the teacher. It proved impossible to develop any group cohesiveness. The disruptive behavior of the children necessitated very forceful management; pupils who violated the clearly set limits were disciplined, usually through isolation from the group or referral to the office. The teachers often felt a need for a more effective means of direct intervention, so that the possibility of using tranquilizing drugs was recommended for investigation. Increased emotional strain on the teachers of the special classes came not only from the pupils themselves but also from other teachers in the school. The disruptive behavior of the pupils caused considerable concern among other staff members. The net result was that teachers engaged in this instruction needed a great deal of support and encouragement.

Toward this end a school psychologist assigned to help with the project for three weeks, was considerably helpful. He not only suggested a procedure for screening children, but he also observed and tested the children throughout the five weeks in which the classes were instructed and offered continuous support to the teachers.

Classes were closed on June 17, and the children who participated were referred to be considered for permanent placement. This brief experience provided a basis for planning more extensive services for emotionally disturbed children for the 1966-67 school year.

Summer Workshop. To prepare teachers to work with perceptually handicapped children, a three-week workshop was given at the University of Cincinnati from June 27 to July 15. The first week included instruction in normal child development, perceptual deficits and diagnosis of learning disability. Remediation was the focus of the second week; the third week continued this emphasis, with structured practical experiences in devising appropriate programs.

Through the summer months the project coordinator was engaged in various administrative tasks, which included opening the project office, attending to staffing needs, completing files and preparing the proposal and budget for the next school year. Some of the project activities implemented in 1966-67 and projected for the future are reported in the evaluation section.

Evaluation Procedures and Results

Although the seven objectives of this project need some clarification and sharper focus, they seem to be concerned with three principal areas of service. Two of the objectives concern provision of special opportunities for educational development, three are related to provisions for social adjustment, and the other two have to do with the development of the professional staff. These three areas will provide the format for this evaluation.

Actually, because of the very limited time for which the project was in operation in its first year, the word evaluation is probably a misnomer. What is reported in this section will be little more than an extension of the narrative, indicating the first steps taken to provide opportunities in the three designated areas and describing briefly what has been done since and what is planned for accomplishing the project objectives.

Opportunities for Educational Development. The first two project objectives are concerned with special educational opportunities required by children with emotional or perceptual learning disabilities. These objectives are:

> To provide adequate educational opportunities for children who might otherwise be denied the privilege of school attendance because of their emotional or learning disabilities.
>
> To prevent the deterioration of the learning process of children with emotional or learning disabilities.

Obviously, the objective that will be attained first is the procedural one of providing educational opportunities. A key question in evaluating the project's success with this goal is "How soon can its accomplishment be expected?" Obviously the short time in which the project operated in the 1965-66 school year was insufficient to provide all the proposed services. The time shortage was made more acute by difficulties in obtaining professional staff and necessary equipment. As a result, project activities that directly affected pupil learning were limited to two five-week experimental classes for the emotionally disturbed.

Whether more should have been expected is a matter of subjective judgment. Since no calendar of dates was proposed as success criteria, one can only attempt a reasonable appraisal, which must take into account the difficulties encountered and the obvious need for very careful pupil identification.

As of the end of the first semester of the 1966-67 school year, the project classes are still only partially filled. Four project classes are operating for the emotionally disturbed and two for the perceptually handicapped. These classes are serving a total of 33 pupils. A fifth class for children with emotional problems will be started in the near future.

Thus, although the importance of this project is dramatically apparent, the selection of pupils has been very slow. One can hardly ignore the many children in local schools who might benefit from project classes, whose admittance is restricted by the screening procedures.

The careful screening, of course, does assure that the services are being given to those who can derive most benefit. It should also be remembered that the entire project, in both its identification and treatment phases, is experimental. There are many unknown factors in the psychological make-up of the children being screened. Finding the best way to select pupils may be considered an important project goal.

The screening process begins with referral by a regular classroom teacher with the approval of the school principal. The pupil is then appraised independently by the psychologist, the visiting teacher, the teacher and the principal. These separate appraisals culminate in a group conference involving all interested professional personnel. Following the recommendation of this appraisal, conference data is accumulated and distributed to appropriate persons, especially to members of the clinical team. A case conference follows and a decision is made concerning the suitability of the special class for the individual child.

From 124 referrals made in the final months of the 1965-66 school year 12 pupils with emotional problems were selected for two experimental classes. These classes met from the beginning of May to the end of the school year, at which time each pupil was appraised to determine the best placement for the following school year.

Of these 12 pupils, three have moved from the project area and nine are continuing in the special emotional problem classes in the 1966-67 school year. These pupils range in grade placement from grade three to grade six and in age from eight to 13. They tend to fall in the low-average range of intelligence with recent Kuhlmann-Anderson group tests showing an IQ range from 74 to 108, with a mean of 88.5, and individually administered tests of intelligence (typically WISC) showing a range from 79 to 105, with a mean of 92.3.

Recent achievement data are available on seven of the nine continuing pupils. In all areas these pupils score below norm. Their achievement, as measured by Stanford tests in May, 1966, ranges from four months to over four years below norm. In general, then, the pupils selected for the experimental classes who were retained for the 1966-67 year are low-average in intelligence with achievement deficiencies that do indeed suggest additional learning problems.

Opportunities for Social Adjustment. The emotional basis of these learning difficulties is frequently exhibited in the social relationships of the pupils. Three of the objectives were concerned with the opportunities for social adjustment. These are:

> To demonstrate the effectiveness of a special educational program in a public school to enable certain children to function outside the confines of a residential instututiom such as a hospital.
>
> To rehabilitate children who have emotional or learning problems.
>
> To provide opportunities for re-entry of children from institutional settings into the community through modified classroom programs.

As each pupil was screened for the emotional problems classes, a variety of social manifestations of emotional conflict came to light. Many incidents of atypical behavior in school were reported, ranging from open rebellion to passive withdrawal. Typically, a pattern of this sort was the primary reason for referral by the classroom teacher.

Deep emotional conflicts continued to manifest themselves in behavioral disorders within the special classes. Often pupils were more overt than before in their display of hostility--a result that had been anticipated by project personnel. Although the five weeks of special service was not enough to effect major behavioral changes, there is some indication of individual improvement of a few pupils. In their appraisal of the classes at the end of the year, teachers reported some progress in several pupils' behavior, particularly on the playground and in the corridor.

Even small behavioral gains would have been unlikely if these pupils had not been given attention beyond what is possible in a regular classroom situation. Their needs are such that they must be taught in small groups by a highly competent teacher, who has the additional support of extensive psychological services. These teachers must be able to tolerate a great deal more disruptive, erratic behavior than customary and yet be able to maintain an unusual degree of firmness or consistency in enforcing whatever limits or rules they must make.

Opportunities for Professional Staff Development. To train teachers adequately for working in this kind of classroom situation demands a concentrated effort. Also, particular attention must be given to providing the necessary program of psychological support. Two of the project objectives were concerned with these phases of staff development. They are:

> To provide opportunities for teachers, psychologists, psychiatrists, and others to extend their skills and understandings of students with emotional or learning disabilities.
>
> To provide facilities for training teachers to work with children who have emotional or learning disabilities in a day school setting.

The in-service training provided through local universities for prospective teachers of the emotionally disturbed and of the perceptually handicapped is described in the narrative section of this report. Courses were offered in the 1965-66 school year to provide the teachers required for the emotionally disturbed classes. Two of the eight teachers who took the training taught the first experimental classes. These teachers subsequently completed the summer workshop for prospective teachers of the perceptually handicapped and are now engaged in that service. The other six teachers trained in 1965-66 to work with the emotionally disturbed are also applying this training, four in project classes and two at the Longview Hospital Children's Unit.

In-service training is continuing in the 1966-67 school year, both formally and informally. The formal program included opportunities for tuition-free course work and workshops. Informally, professional competence is increased through the conferences, reading and personal study required in working with project children.

There is, however, a broader aspect of in-service professional training that has been of considerable concern to those engaged in the project. Great importance is attached to communication with professional personnel in all target schools concerning the needs of children with emotional or perceptual learning handicaps. Obviously, the project cannot extend at this time to all such children in the target schools. Many, particularly children with less severe emotional disturbance, must remain in a regular classroom setting. Teachers must be helped to find ways of promoting the adjustment and academic progress of these pupils.

Originally this kind of assistance was seen as a function of members of the clinical team. Difficulties in procuring personnel, however, have severely limited the extent to which this has been possible. For example, instead of a regularly assigned psychiatrist to head the team, the project has been operating with several psychiatrists, who give service as their schedule allows. Obviously, no organized communicative effort can be directed in this way. The important interpretive and supportive aspects of project service to regular teachers have thus been neglected.

Certainly, teachers recognize a need for paying more attention to children with special needs. This fact is evidenced by their ratings of three related items on the Teacher Survey administered throughout the city in June, 1966. Of 48 items on the survey "Provision for emotionally disturbed child" and "Provision for socially maladjusted child" were ranked lowest, while "Provision for physically handicapped child" ranked 44th. Since special project classes cannot be provided for all these children, it would appear that such key school personnel as the school psychologists and target school principals must provide the leadership required for the vital tasks of interpretation and support. Only in this way can these children be effectively served in their regular classrooms.

Recommendations

Several recommendations seem appropriate as the implementation of the Emotional and Learning Problems project proceeds:

1. That measures be taken to expedite the selection of pupils for special classes, particularly those for the emotionally disturbed. Although the need for careful screening is very obvious, existing opportunities to furnish the drastically needed services to special pupils are not being optimally utilized. This fact demands that every possible effort be made to select children more rapidly.
2. That continuous evaluation of project pupils be conducted to determine any significant gross changes in their educational or social behavior patterns. If the special classes are seen to have a negative effect on any of the children, it is imperative that other means be found to meet their needs. On the other hand, before any pupil is returned to a normal classroom situation it must be known that he is ready for such a move, so that gains made through the special services will not be lost.
3. That school psychologists and target school principals assume responsibility for an organized effort to provide more effectively for children in regular classes who have special needs. This task might involve setting up a series of lectures or seminars around this topic or devoting portions of staff meetings to discussing problems in this area.
4. That the in-service training opportunities offered as a part of the project be more widely publicized so that all teachers might be made more aware of the special needs of pupils with emotional problems and learning disabilities. At the same time, teachers who are engaged in conducting the project classes could be given the strongest possible support in dealing with difficulties encountered in daily work with this kind of pupil.

Summary and Conclusions

The Emotional and Learning Problems project was initiated to provide much needed specialized services for two categories of pupils: those with emotional problems and those with perceptual learning difficulties. The project aimed to give small group instruction to both classes of youngsters and generally to improve their educational and social condition.

Shortly after project approval in February, 1966, the process of organizing a clinical team of psychiatrist, psychologist and social worker was begun. Difficulties in locating competent personnel caused considerable delay in project implementation. These problems were aggravated by delay in obtaining adequate materials and supplies.

As the project progressed, training classes were initiated for prospective teachers of the emotionally disturbed. In May, two classes for this type of pupil began on an experimental basis. These efforts in the first year of the project established procedures for continuance in the 1966-67 school year.

The preparation offered under the project for teachers of the emotionally disturbed and a summer workshop to prepare teachers to work with the perceptually handicapped have taken care of the immediate staffing needs for teachers. Four emotional problems and two perceptual classes have been in operation in the 1966-67 school year.

Filling the need for supportive personnel has remained a problem. This not only has delayed the project's implementation, but it also has interfered with the important project task of helping teachers deal with special pupil problems in regular classroom settings. Means must be found to alleviate these difficulties.

PHYSICAL HEALTH SERVICES

Introduction

Maintenance of physical health and remediation of illness are considered top priority needs of disadvantaged children. A healthy body is a prerequisite to optimal educational achievement. Although the Cincinnati Board of Health has traditionally provided medical and nursing service to public and non-public schools in target school areas, these health services have not been adequate to meet the special needs of pupils enrolled in these schools. Improved dental care has recently been made possible through a system of dental clinics funded by the Office of Economic Opportunity, but no systematic effort to increase medical and nursing services could be made prior to the Education Act.

This project attempted to improve these aspects of the health service program in all target schools by providing additional medical personnel and necessary supplies and equipment. This added service was expected not only to provide early identification and treatment of health problems, but also to promote desirable changes in personal health habits of pupils and their families.

Doubtlessly, the conditions that exist in many homes are conducive to illness. Improper food care, unsanitary toilet conditions and poor heating and ventilation give rise to various types of health problems. Many parents send their children to school when they are ill, expecting the school nurse and doctor to diagnose their illnesses. Parents themselves often are unable to determine whether or not their children should attend school.

Increasing the nursing staff in project area schools enabled administrative and instructional staff to communicate with the nurses concerning pupil needs. Nurses then made necessary pupil and parent contacts to attend to these needs. Having the nurse work closely with the parents was seen as the best means of improving the health experiences of the entire school community.

Objectives

The health services provided by this project were designed to achieve the following objectives:

1. To appraise the physical health status of pupils in the target disadvantaged areas of the city through expanded examinations and screening procedures.
2. To counsel pupils, parents and school personnel concerning appraisal findings.
3. To make appropriate referrals for the evaluation and/or correction of defects.
4. To provide kindergarten, first and second grade pupils with immunization protection against measles.
5. To provide emergency service for injury and sudden illness.
6. To endeavor to bring pupils to optimum health status that they may have a richer experience in all educational opportunities.

Project Narrative

Inauguration. The Physical Health Services project was approved on January 11, 1966. Procedures were begun immediately to implement the project in accordance with the proposal.

Prior to project approval, the additional amounts of professional time needed to administer adequate health services to the target schools were estimated. Because these services in the Cincinnati schools are administered under the Cincinnati Board of Health, this group provided the estimate of time needed in each of the primary target and secondary target schools for nursing services and medical services of a physician. The total estimate of required nursing time for all target schools was 758 hours per week, compared with 342 hours of weekly service available prior to the project. The estimate of the medical services of a physician was 182 hours a week; this compared with 148 hours before the project.

Nurses were also to be given time for home visits amounting to one third of the time they were assigned to each school.

Personnel. The shortage of medical personnel in Cincinnati, as in most other parts of the country, is a well-known fact. However, as attempts were made to implement the project, it became obvious that these problems were even more severe than anticipated. Difficulties were especially acute in locating registered nurses to provide needed services. For this reason, practical nurses were used in many instances.

These personnel shortages made it impossible to increase health services in target schools to the extent initially proposed. All available professional service was contracted, including additional time of Board of Health physicians and part-time services of eight registered nurses and twelve licensed practical nurses. The project also employed 15 clerks to keep records and perform other clerical duties. Where available, volunteer service was used for more routine tasks, but the hours of such service totaled less than 100 through the complete four months of the project.

Equipment and Materials. The project required no increase in physical facilities, but it did demand certain additional items of equipment and a number of consumable materials. Instruments for use in vision and hearing tests, and file drawers for keeping records were items of equipment purchased with project funds. Materials included health record cards and jackets as well as forms for immunization, referrals and other project uses.

Services. The first phase of service under the project was a physical examination provided for all pupils in target school areas in grades four, seven and ten. All other target school pupils referred by members of the professional staff were similarly examined. In addition a considerable number of physical examinations were given to determine fitness for participation in sports.

Grades four, seven and ten were chosen for routine physicals because these are the first intermediate, junior high school and senior high school grades, and pupils typically spend the two following years in the same school. Teachers in all target schools were asked, however, to look for pupils who appeared to be in need of physical examination and to refer them regardless of grade level.

With each physical examination, thorough health records were completed and those for pupils needing additional attention were tabbed. Pupils who were examined were given appropriate immunization shots for diphtheria, pertussis, tetanus, smallpox or polio. In those target schools with primary grades, measles vaccine was available to any pupil who had not previously received it or who had not had measles. About 10,000 doses of this vaccine were administered.

The second phase of project services consisted of follow-up of those pupils whose records had been tabbed at the time of examination. Referrals, usually to clinics of the Public Health Department, were made for these pupils. Where clinical attention seemed necessary, an attempt was made through home visiting to induce parents to provide necessary care. The referrals that were then returned to the school were checked by the nurse to insure that appropriate action had been taken.

Project personnel also gave lectures to groups of pupils and parents. These, however, were secondary in importance to the direct services rendered to the pupils and the more personal counseling services performed with the parents. The number of lectures in all schools through the four months of the project actually decreased from 588 in these same four months of the 1965 school year to 415 in 1966.

Throughout the project, detailed records were kept in every phase of services in all schools. These records reflect the number of cases served in each month by category. It is on these data that evaluation of this project will be based.

Evaluation Procedures and Results

Records kept in target schools in March through June of the first project year indicate both the number of cases receiving each kind of health service and the conditions of illness discovered in the screenings and examinations. These records thus provide a basis for evaluating the procedural objectives that constitute the bulk of the projects' goals and also furnish baseline data for future appraisal of project success in achieving the long-range objective of optimum pupil health.

The evaluation procedure will be to relate the data collected from these records to the pertinent project objective. Except for the sixth objective, each category of data will be compared with any available figures from the corresponding period in the preceding school year. This comparison will suffice to determine whether the proposed services have indeed been successfully implemented. In the case of the sixth objective, which concerns optimum pupil health, the conditions detected must be viewed as baseline data since the effect of the project services on the health of pupils cannot be adequately measured after only four months of service.

Objective 1. To appraise the physical health status of pupils in target disadvantaged areas of the city through expanded examinations and screening procedures. The expansion of the physical examination service for project schools included thorough examination of pupils in grades four, seven and ten. In addition, teachers of other grades were encouraged to refer any pupil whose health status seemed doubtful, and these pupils were also carefully examined. Physical examinations were given as usual to determine fitness for participation in sports. Finally, screening procedures were expanded in such services as tuberculin testing and testing for visual and auditory defects.

Table 1 compares the number of physical examinations and screenings conducted in target schools by Health Department personnel in March through June, 1966, with the number of cases for the corresponding period in 1965.

Table 1. Numbers of Examinations and Screenings Conducted by Health Department Personnel in Target Schools, March through June, 1965 and 1966.

Service	1965	1966
General Physical Examination, Grades 4, 7, 10	2289	4423
General Physical Examination, Referred by Teacher	2	136
Athletic Examination	1742	2061
Tuberculin Testing	139	898
Vision Testing	2644	4981
Hearing Testing	306	29
Other Screening	1180	1651
TOTAL	8302	14179

The data in this table show that the goal of more thorough appraisal of pupil health status was indeed achieved through the project. Increases are evident for all categories of service except hearing testing. Delays in securing audiometric equipment and in training personnel to use it limited the number of hearing tests under the project. The number of pupils given physical examinations nearly doubled, and the total cases examined or screened rose from 8302 in 1965 to 14,179 in 1966. In terms of average daily membership of target schools, this represents an increase from 26.3 to 44.8 examinations or screenings per 100 pupils. Particularly striking is the teacher response in referring pupils for special physical examination. This figure increased from two in 1965 to 136 in 1966.

Parents of pupils in grades four, seven and ten were permitted to indicate a preference that the physical examinations be conducted by their private physician. In the months of project service, 102 parents in the target schools submitted evidence of such physical examination. This compared with 92 such cases in 1965.

Objective 2. To counsel pupils, parents and school personnel concerning appraisal findings. Adequate follow-up of the physical examinations and screenings conducted under the project required that parents be advised of the outcomes of these examinations. In many cases detailed interpretation was required either to explain what future attention was advisable or to help parents understand the need for improving personal conditions related to health.

To accomplish this goal, both nurses and physicians employed under the project made a concentrated effort to arrange conferences, many of which involved school personnel and the parents of the youngsters who needed attention. In sharp contrast to the 80 cases in which such conferences were reported in the final months of the 1964-65 school year, project records for the months March through June, 1966, show that 943 conferences were held. For many of these, both nurse and physician were present. In 772 cases, contact was established between the nurse and the parents. School physicians reported 71 such contacts.

To promote better communication between medical personnel and parents, the nurses tried to allot about a third of their time in each school to making home visits. Going to the home also facilitated more accurate diagnosis of some of the causes of the health problems of youngsters. Wherever unsanitary conditions were found or other evidence of poor health habits seemed indicated, the nurses counseled with the parents concerning the dangers of such practices. A total of 568 such home visits were recorded.

Although the limited records of similar counseling efforts in the preceding school year are not considered reliable, nurses and physicians assigned to schools in the past have had little opportunity to engage in conference either at the school or in the course of home visitations. It would seem, therefore, that the opportunity for such follow-up provided by the project is very worthwhile.

Objective 3. To make appropriate referrals for the evaluations and/or corrections of defects. Another essential part of the contact of medical personnel with parents was recommending means of further diagnosis or treatment of health problems. For cases serious enough to require further attention, nurses or physicians would make appropriate referrals, usually to public health clinics. Where appropriate, project personnel also scheduled appointments for pupils and followed through to insure that these appointments were kept.

No record was kept of these referrals. This phase of project service is seen, however, as highly important. The policy of the Cincinnati Board of Health requires that physicians and nurses assigned to schools confine their services to diagnosis and emergency first aid. No effort to increase the effectiveness of this diagnostic service can bear fruit without proper provision for treatments or for more thorough analysis of health problems.

In many disadvantaged families, particularly, parents seem not to have appropriate concern about the health of their children. But perhaps even more common is the lack of information about symptoms of physical problems that need attention and how to go about getting proper care. Added to these factors is a natural reluctance, shared by many people, to risk uncovering a major physical problem or to subject oneself to possibly unpleasant treatment of indefinite nature and duration. All these factors underscore the need for project personnel to give all possible assistance in facilitating the procurement of further necessary medical attention.

Objective 4. To provide kindergarten, first and second grade pupils with immunization protection against measles. Because measles is an extremely common disease, which not only causes pupils to be absent from school but also very often leads to complications, the project attempted to protect very young pupils through the administration of measles vaccine. The opportunity was provided for any pupil in kindergarten, grade one or grade two who had not previously been immunized or had not had measles to receive this vaccine. A total of about 10,000 doses were given to target school pupils. This represents 86.7 per cent of the average daily membership of these early grades.

With the development of this vaccine, measles and its complications--particularly encephalitis and resulting permanent brain damage--can virtually be eliminated. Through the administration of the vaccine in this project, the incidence of the disease has been diminished.

Objective 5. To provide emergency service for injury or sudden illness. The need for first aid service exists in every school. Regardless of the thoroughness of safety precautions in classrooms and on playgrounds, some accidents take place and injured pupils must often be given immediate attention. Similarly, illness very often occurs suddenly, requiring immediate inspection or service. This latter problem is believed most acute in disadvantaged area schools.

In cases where a pupil is struck by injury or illness in school, his teacher normally will make a referral on a standard form to any medical person who happens to be on duty. Accurate records of these referrals are maintained as a matter of routine. Table 2 compares the number of such teachers referrals in each project month of 1966 with that for the preceding year. It also shows the total number of pupils seen for sudden illness or injury by the school nurse or doctor.

Table 2. Referral and Disposition of Pupils Seen in Target Schools by Health Department Personnel for Injury or Sudden Illness, March through June, 1965 and 1966.

	1965					1966				
	March	April	May	June	Total	March	April	May	June	Total
Pupils Referred by Teacher	4994	3924	3328	1715	13,961	3834	3793	3975	2088	13,690
Pupils Seen by Nurse	4955	4317	3365	1792	14,429	3837	4133	4078	2140	14,188
Pupils Seen by Physician	1139	938	574	102	2,753	573	644	564	304	2,085
Pupils Given First Aid	1154	876	973	439	3,442	739	793	1033	634	3,199
Pupils for Whom Exclusion from School was Recommended	883	656	521	202	2,262	545	543	653	285	2,026

Ordinarily when there is a physician on duty, pupils are first screened by the nurse, who might administer first aid, recommend that the pupil be excluded from school or merely advise the pupil on what course of action to take. More serious cases are referred to the physician, who also might give first aid, recommend exclusion or return the pupil to class.

The totals in Table 2 show a slight decrease from 1965 to 1966 in all categories of pupils seen for injury or sudden illness. This fact might suggest the conclusion that emphasis on health in the target schools led to a decrease in the number of health problems requiring immediate attention. Such a deduction seems unwarranted, however, when the monthly data are considered. Whereas in 1965 the figures tended to decrease steadily from March to June, the 1966 figures tended to increase through May. In other words, as the project progressed, and more emphasis was placed on physical health in the target schools, the number of pupils coming to the nurse and physician grew larger. The smaller June figures are explained, of course, by the fact that school was in session for only part of the month.

Such an increase in the number of pupils served may be viewed as one of the key goals of the project. The discussion above, however, reflects one of the chief difficulties in appraising project success. Every case of illness recorded is both a positive and a negative statistic. To detect illness where it exists is certainly a desirable outcome of intensified health services. However, in the long run, a decrease in the number of cases of illness is the main indication of whether the project has been successful.

Objective 6. To endeavor to bring pupils to optimum health status so they may have a richer experience in all educational opportunities. The interpretive difficulties spelled out above are particularly acute in relation to the sixth objective. This final objective specifies the single ultimate goal of the Physical Health Services project and that of all other school provisions related to pupil health. If one were to look for measurable progress toward this goal in the few months of the first project year, it would be impossible to interpret project statistics sensibly. On the one hand, one would be hoping for a decrease in the incidence of physical ailments. On the other, it would be hoped that intensified health service would produce a more thorough discovery of existing illness. Thus, no criterion of success could be established.

In reality, though, one can hardly expect much progress toward the ultimate goal in a few months' time. The really meaningful evaluation of the final objective must wait until service has been offered at least through the first full year and the intended effects of this service on the actual health status of pupils has some time to develop.

At this time a reasonable approach would seem to be to establish a baseline of physical health conditions with which future findings can be compared. Medical records kept under the project together with those for the preceding year provide a thorough indication of the types of physical disorders detected among the target children. The number of cases of various types of ailments found in March through June of 1965 and 1966 are shown in Table 3. Although the figures for the two years are compared, it should be remembered that the goal is to establish a baseline and not to draw any conclusions about the relative status of pupil health in the two years.

It will be noted that there was an increase from 5977 in 1965 to 6210 in the number of ailments detected. These figures represent an increase from 15.0 per cent of average daily membership to 15.6 per cent. In relationship to the number of cases examined or screened, however, (see Table 1) the figures represent a decrease from 72.0 per cent in 1965 to 43.8 per cent in 1966. In other words, an increase of 5877 examinations or screenings turned up 233 more instances of physical ailments.

In both periods of time reflected by the data in Table 3, dental defects were the most common condition while respiratory ailments ranked a close second. Other ailments found with some frequency included defective vision, various skin diseases and enlarged tonsils. Presumably the decrease in the "Miscellaneous" category is traceable to more definitive diagnoses in 1966. The classification of "Enlarged Glands" for example, was not maintained in 1965.

Recording comparable data on the detection of adverse physical conditions in the 1966-67 school year will provide a basis for comparison and evaluation of gains made in achieving better pupil health. One might, for example, compare the number of defects found in March through June, 1966, with the number identified in a similar number of examinations and screenings in the following year. Hopefully, there will be some decrease. It is likely, though, that such decreases will come about gradually since both the ailments and the conditons that cause them have in many cases developed over a period of years.

A less direct way of assessing the extent of improvement of pupil health is a comparison of attendance data from year to year. The data on percentage of daily absence collected for evaluation of the Education Act program show a reasonable consistency in the attendance patterns of children in target schools. For the six-year period concluding with the 1965-66

Table 3. Cases of Physical Ailments Detected in Target Schools by Type, March through June, 1965 and 1966.

Conditions	1965	1966
Malnutrition	42	33
Obesity	113	69
Skin Diseases	719	597
Defective Vision	715	1035
Disease of Eyes	202	211
Defective Hearing	78	13
Disease of Ears	105	139
Dental Defects	1096	1306
Tonsils (enlarged)	455	504
Functional heart conditions	91	192
Organic heart conditions	9	14
Respiratory Ailment (colds)	1069	1286
Chest Deformities	4	23
Orthopedic Defects	148	129
Genito-Urinary Ailment	39	35
Speech Defects	12	15
Nervous Disorders	132	90
Miscellaneous	948	407
Glands (enlarged)	*	112
TOTAL	5977	6210

*No record kept

school year, the average percentages of daily absence in target schools were as follows:

Primary Target	Secondary Target
Elementary = 9.0%	Elementary = 8.7%
Secondary = 13.2%	Secondary = 10.9%

If these percentages are found to decrease markedly in the 1966-67 school year, one might hypothesize that the improved attendance is due in part to better health.

Recommendations

To promote the advancement of the Physical Health Services project toward the attainment of its objectives, the following recommendations are offered:

1. That positive efforts be continued to maintain as adequate a staff as possible and that unavoidable personnel shortages be alleviated by continuing effort to locate volunteer services. Members of the community who are willing to give of their time should be utilized well in relieving medical personnel of clerical and miscellaneous other duties.
2. That concentrated attention be given to continuous orientation of teachers to the goals of the project and the health needs of disadvantaged children. Alertness of educational personnel to symptoms of physical illness or undesirable conditions in the home is a key avenue to identifying situations that need attention. Because the orientation of most teachers is fundamentally more intellectual than physical, there is a danger that the important role of the teachers in this project might be overlooked.
3. That emphasis be placed on the follow-up of cases identified as needing attention in the examination and screening process. Keeping contact with pupils and parents where there is a need for

further diagnosis or treatment is an extremely important phase of project service. To whatever extent it is practical, it would seem advisable to keep accurate records of this follow-up procedure. Data thus collected would be a valuable supplement to the records on the incidence of physical ailments in evaluating improvement in pupil health.

Summary and Conclusions

The Physical Health Services project was inaugurated in the target schools primarily to promote general improvement in pupil health, thereby enabling these pupils to achieve as well as possible in their school work. An estimate of the minimum amounts of time medical personnel would be required to serve these schools adequately was made by the Cincinnati Board of Health. Severe shortages of available personnel make it impossible, however, to fill all the positions indicated in the project proposal.

Utilizing the services of part-time physicians and registered nurses together with those of twelve full-time practical nurses, the project gave intensified examination services, particularly in grades 4, 7 and 10. A variety of screening procedures for physical defects was another important part of the diagnostic services offered by the project.

The follow-up of these diagnostic procedures included health counseling with pupils, parents and school personnel and referrals for further diagnosis or treatment. A substantial portion of the time that nurses were assigned to schools was given to making home visits. The entire follow-up effort was geared to insuring that the increased diagnostic services would indeed promote an eventual improvement in pupil health.

Other services under the project included the administration of measles vaccine and more complete provision of emergency service for in-school injury or sudden illness.

Data collected in relation to all these project goals indicate generally successful implementaton of the proposed services. The number of cases in nearly all categories of services increased from the corresponding period of the preceding year.

The more extensive examination and screening services led to an increase in the detection of most types of physical ailment. The ratio of number of cases detected to the number of examination and screenings conducted provided a baseline for measuring future improvements in pupil health status.

No drastic changes in the nature or organization of project services seems indicated by this evaluation. The greatest need seems to be a continued attempt to relieve shortages of personnel. Less important, though perhaps more feasible, areas of emphasis are continued teacher orientation and careful systematic follow-up of those cases that need additional attention.

STAFF LEADERSHIP DEVELOPMENT

Introduction

The need for better education for disadvantaged youth is indisputable. The only issue is how best to achieve it--especially in the central city of large metropolitan communities. Teachers, administrators and supervisors who serve in these schools must possess certain specialized knowledge and skills in order to employ the most effective techniques for meeting the educational and developmental needs of these children.

A climate of poverty and social disorganization creates enormous problems for children, both before and after entering school. Morton Beiser, in an article in the January 1965 issue of The Journal of Social Issues,[1] brings into focus the implications of the problems for teachers and educational leadership personnel. This article and much recent research clearly delineate the unique and persistent needs of children from disadvantaged homes as contrasted from those coming from average or above average middle-class environments.

One of the central tasks in providing more appropriate education for disadvantaged children is to help teachers, principals, supervisors and other educational personnel to perceive more clearly the conceptual dimensions of their positions and to develop more effective skills and techniques for carrying out their educational responsibilities.

Teacher education institutions have not been signally successful in graduating teachers well oriented and trained to work in schools serving disadvantaged children. This is not altogether the fault of the training institute because the teaching profession has generally attracted individuals who come from middle-class backgrounds. Like tends to beget like. For this, as well as other reasons, school systems are obliged to take the personnel they have and develop training programs to "close the gap" between what is and what is needed if better education is to be provided for disadvantaged children.

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[1] Beiser, Morton, "Poverty, Social Disintegration and Personality," The Journal of Social Issues, January, 1965, pp. 56-78.

The Cincinnati Public Schools already have within their ranks a reservoir of insightful and able teachers, as well as leadership personnel, who are successful in enabling disadvantaged youth to match their more advantaged peers in educational endeavors. The need is to multiply the number of these staff members.

There were three broad purposes for this project.

1. Conceptual information and understanding. The dimensions of cultural deprivation were to embrace such topics as:
   - -- Effect of poverty on the physical, emotional, social and intellectual development of the child
   - -- Myths and realities related to the problem of deprivation
   - -- Family patterns among the disintegrated poor
   - -- Language patterns, sources of motivation, reactions to power and authority, etc., of the disadvantaged child
2. Situational identifications. Stress was to be put upon the need to cultivate identification with the situations with which these teachers and leaders are working day-by-day. This would include, among other things:
   - -- Person-to-person contacts with parents and families
   - -- Liaison with agencies and organizations indigenous to the community
   - -- First-hand knowledge about the physical environment of the school and the homes it serves

   It was believed that this type of situational identification will better enable the participants in training to secure additional background understanding and to have a more realistic frame of reference from which to work.

3. Problem solutions. The trainee, hopefully, would gain insight and skill in the solutions of day-to-day "operational problems." This suggests participation in specific assignments and areas of study which would result in new knowledge and more effective performance skills. Examples of this type of involvement are the following:

   -- Participation in case studies

   -- Involvement in a study group designed to "unravel the causes" of a specific behavior problem

   -- Individualized study programs

   -- Application of certain teaching techniques on a try-out or "action research" basis

   Training in these three general areas is not only relevant to the needs of disadvantaged children but is basic if teachers and leadership personnel are to develop the kind of expertise required for working with these children.

Objectives

1. Provide more knowledge which relates to the educational needs of disadvantaged pupils.
2. Achieve more accepting attitudes toward disadvantaged pupils.
3. Develop a design of follow-up training for individual target schools.

Project Narrative

In an effort to achieve the above objectives, two different kinds of activities were initiated: stimulus presentation and staff involvement. These were separate but inextricably related aspects of the total project. In a general way, the basic plan of the project was to provide information to certain members of the professional staff of the Cincinnati Public Schools, and then arrange for these persons to interact among themselves and with those who provided the information in such a way that knowledge and attitudes might be modified. Said another way, the plan of this project presumed that making "good" information from outstanding authorities in the field readily accessible would be an important requisite for helping teachers and others learn more about the problems and the situations which affect the educational development of children in central city schools. On the other hand, it was also presumed that mere presentation of information would not be enough. Some way of working with the information would be required which would enable those who were involved to find real meaning and personal significance in the information so that their own experiential background and their own attitudinal structure would be changed in those directions which meant more and better learning for the children whom they teach.

Dr. William Morse, University of Michigan, was asked to serve as an advisor to the project committee both in the formulation of the training plan as well as in its initial implementation. Due to the lateness of initiating this project, it was recognized that only the minimal activities could be carried out. Nevertheless the committee felt it was imperative to at least "start" even though little could be achieved due not merely to the limitation of time but also to the time of the year; namely, late spring with the pressing duties of closing the school year. While they felt this to be a real deterrent to the success of the project, at the same time it was believed the foundation could be laid on which fall training could be built with the further possibility of making limited evaluation of the procedure. Thus, one major workshop was planned with the purpose of enlarging conceptual understanding in the area of the impact of poverty on pedagogy. Follow-through of this workshop was also planned for involvement of the target school staffs.

The intent of this particular program was not comprehensive in nature but rather more experimental to ascertain whether or not this particular training plan might have possibilities, or whether further refinement would be required in the fall plans.

Dr. William Kvaraceus, Tufts University, and Dr. William Morse were chosen as consultants for this workshop for it was felt their presentation would be sufficiently provocative to foster not only discussion but further action on the part of the staffs.

The plan of the workshop encompassed:

a. Presentation to the principals and certain other leaders followed by reactions and questions from a panel consisting of two teachers and a principal.

b. The afternoon of the workshop was spent taping the consultants' presentation and panel reactions and questions for subsequent televised sessions to the entire staffs of the target schools.

Personalized communication of the consultants' presentation to the staffs in such a way that the impact of their message would be felt was a major problem. To accomplish this each target school had identified three key teachers who would work with their principals in communication as well as implementing training plans. A preliminary showing of the televised panel program was offered to these teachers and principals for their preparation for the regular program. At the regular program these teachers were the discussion leaders in their own school groups.

Target schools were then grouped and the principals and key teachers met to exchange their ideas following the regular televised program for all staff members. This was to promote further cross-communication among these schools relative to their reactions and various training plans.

Each target school was encouraged to submit their training needs, ideas and plans to the training coordinator of the project by the close of the school year. Thus these plans were to be used as a basis for initiating the new training project in the fall.

In addition, a number of the target schools involved their key teachers and other members of their staffs in individualized training programs in the school such as: visiting homes with the visiting teachers, staff discussions with the school psychologists, visiting teachers as well as other professional personnel from community agencies.

Evaluation Procedures and Results

Inasmuch as the basic objectives of this project were to provide knowledge, modify attitudes, and develop training experiences for those who work with children in center-city schools, it was important to devise evaluation procedures which would determine whether those objectives had been realized. The original evaluation design called for observations of teachers and children before and after training. This original plan had to be modified for a number of reasons. Dr. Jack Frymier, Ohio State University, was employed as evaluation consultant with the understanding that he would work with colleagues on the university campus to select or devise testing instruments which would provide baseline data. A team of five other persons from the university setting, representing the disciplines of sociology, psychology, curriculum instruction, and evaluation came together to form a team to assist in planning the evaluation. These persons met together on many occasions, and also did extensive research individually in an effort to make the evaluation proposal valid, reliable, and workable.

Evaluating this project involved collecting baseline descriptive data from several different groups through planned sampling process. As was mentioned above, the original plan called for a before-after series of observations to determine the effectiveness of the Staff Leadership Development project. Because of a sequence of very natural but unforeseen events, it was mid-February before the project was approved, late March before evaluation plans were initiated, and late April before the conceptualizations were finalized. With less than six weeks of the school year remaining, it seemed unreasonable to plan a series of "before" and "after" testing sessions, with the presentation of information and staff involvement in between. It was decided, therefore, that whatever tests would be given would be employed with the notion of collecting baseline data; that is, describing what did exist at that moment in terms of teachers' knowledge, attitudes, and ways of working with children from center-city schools.

Three assumptions prompted this decision. First, the project would probably continue in future years; therefore, baseline data collected in June, 1966 could constitute appropriate pre-test data for future projects. Second, if the project continued, it seemed imperative that the data collected be useful in longitudinal terms. Third, if the observational data collected were sufficiently descriptive, then by studying the particulars involved (i.e., response to various items on some of the tests), it should be possible to make inferences about precise points of competence or difficulty reflected in the areas observed. A series of decisions were made aimed at collecting the largest amount of data possible, but still making the least demand on people's time. By utilizing certain principles from sampling theory, the final evaluation rationale began to emerge.

Because this was a staff development project, it seemed reasonable to assume that most of the data collected would pertain to members of the professional staff who were involved. However, the ultimate test of any in-service education venture rests upon the extent to which that program manifests itself in the lives and minds of the youngsters with whom the professional staff work. Various aspects of the program evaluation report are intended to reflect such changes in pupil behavior.

In keeping with the three specific objectives of this project, measuring instruments were specially developed or deliberately selected to deal directly with each objective. Only teachers in target schools took any of these tests. Teachers in the control school were not given this battery of tests. The instruments used were: Urban Education Information Test; Teaching Situation Reaction Test; Organizational Climate Description Questionnaire; GNC Educational Views Inventory; and the Adjective Checklist.

For collecting baseline data from teachers, three different testing packages were prepared. Each "package" contained two or three testing instruments which were distributed in the schools by the principal but taken by the teachers either after school or at home. Each package contained, in addition to the test materials, a complete set of instructions. Teachers were not asked to identify themselves. The use of three test "packages" was devised so that no individual teacher would be burdened with taking too many tests. In this way, a one in three sampling was guaranteed from the professional staff for each of the instruments administered, with the exception of one test, the Urban Education Information Test, which was contained in all three packages.

Remembering that the instruments were given on a post-project basis only, the amount of growth toward the objectives of this project could not be measured but instead represents benchmark data about teachers and administrators. There were approximately 1100 teachers involved in both the primary target and secondary target schools. While four of the instruments were given to only one out of three teachers, the sampling was sufficiently randomized to believe that the results would be representative of teachers in the target schools generally. It should be emphasized that, in addition to supplying baseline data, a major purpose of these instruments was to give some direction to the In-service Training project for future years. While the Urban Education Information Test has face validity in terms of measuring knowledge which relates to the needs of disadvantaged pupils, the remaining instruments are not as directly related to the objectives.

It is apparent that in reporting the results of these instruments, correct answers to test items cannot be given in any precise way simply because the instruments would be invalidated for use next year. For these data to be truly baseline data and subject to comparison with next year's responses, the tests must remain secure or better results will be obtained automatically from studying the "correct" answers. Attempts will be made, however, to arrive at generalizations regarding future direction of the project.

Objective 1: To Provide More Knowledge Which Relates to Educational Needs of Disadvantaged Children

The test most directly related to measuring "knowledge about" disadvantaged children was the Urban Education Information Test. The Urban Education Information Test, as the name implies, was designed to measure knowledge about various aspects of education in an urban setting. The test is a 40-item multiple choice type instrument developed under the direction of Dr. Jack Frymier at the Ohio State University especially for this project. Items were prepared at Ohio State by a sociologist, a psychologist, and several educators familiar with the problems of urban education and were predicated on such publications as Education in Depressed Areas and Review of Educational Research. Items on this instrument were keyed by at least four "experts." It was hoped that through item analysis procedures particular areas of strength and weakness could be identified in such a way that future staff development activities could focus on precise points effectively. Since this test was developed specially for this project, no opportunity for field trial was available. Consequently, several items were found to be ambiguous or indeed viewed as obnoxious by some members of the staff. This instrument will be revised somewhat in light of staff reaction.

In spite of these limitations, the test items were keyed to the results of research studies and as such represent a measure of knowledge of research results in the field. The test was scored in terms of number right. In addition, per cents of correct responses to each item were determined for diagnostic purposes and for future aid in in-service training.

Table 1 shows the mean scores on the test for various groups of professional personnel. It is obvious from table 1 that teachers tend to score similarly and administrative and central office staff persons tend to score somewhat higher than teachers' groups. An analysis of variance showed no significant difference in mean scores among the teacher groups. Similarly, there was no significant difference among administrative or central office staff. The latter means, however, were significantly higher than the former. There is no reason to expect score differences among teacher groups since all could participate in the training activities.

Table 1. Mean Scores of Various Professional Groups on the Urban Education Information Test.

Group	N	Mean	Standard Deviation
Primary target, elementary teachers	295	20.31	4.83
Primary target, secondary teachers	106	20.60	5.45
Secondary target, elementary teachers	392	20.89	4.55
Secondary target, secondary teachers	134	20.13	5.65
Others (blank)	152	19.70	5.72
Administrators, elementary	16	22.50	5.20
Administrators, secondary	15	23.53	4.87
Central office	76	24.33	7.75

In order to use test results diagnostically, items were grouped into four rational categories. The average per cents of correct responses to each category were computed. The categories, number of items and average per cent of correct responses are shown below:

Category	Number of Items	Average % of Correct Responses
Characteristics of the disadvantaged	5	65%
Social-psychological facts or principles	19	51
Educational or pedagogical knowledge	11	50
Interpreting and understanding tests	5	56

From this type analysis, little difference is noted except in teacher's knowledge of characteristics of the disadvantaged child which is appreciably higher than the other categories.

A majority of respondents answered about two-thirds of the items according to the keyed answers thus showing a fair amount of knowledge over content areas measured. An interesting inconsistency in response was noted. On the one hand, 75% of all respondents registered their "belief in their (pupils) educability and worth as individuals" as the most essential factor for successful education. Further, 50% believed the most positive improvement factor in pupil learning is in changing the attitudes of the professional staff. Both items reflect the importance of teacher attitudes upon pupil learning. Yet, when asked to identify the greatest deterrent to higher achievement, only 34% identified "low level of expected achievement by teachers" while 38% identified "broken home background," 20% "dislike for academic work" and 8% "low intelligence." To be consistent with the first two items cited, one would expect a larger per cent identifying low level of expected achievement as being the greatest deterrent to higher achievement.

While the Urban Education Information Test was designed to measure "knowledge about" several kinds of information pertinent to educational problems in an urban setting, the Teaching Situation Reaction Test (TSRT) was employed to obtain a picture of how teachers cope with certain educational problems within a hypothetical classroom setting. The instrument contains 48 items and requires the respondent to rank order 4 options for each of the 48 situations described. This experimental instrument has been subject to many revisions both in terms of content and mode of scoring. A new scoring system, in fact, has been devised since the instrument was scored for this study. In the writer's opinion the keyed answers depend too much upon situational variables extant in a school system. A "good" response in one school system (or indeed from school to school or teacher to teacher within a system) may be inappropriate in another. Since a knowledge of what the instrument is measuring is lacking, a report of results is superfluous. Whatever the TSRT does measure as reflected by the total score, it did show that various classifications of teachers, whether primary or secondary target, or elementary or secondary teachers, did score approximately the same on an average. Until further evidence of test validity can be obtained, this instrument will not be repeated in 1967.

Objective 2: Achieve More Accepting Attitudes Toward Disadvantaged Pupils.

Before any attempt to measure this objective is made it is important to clarify its implications. To say that teachers should accept the behaviors of children, whether disadvantaged or not, is contradictory to the education process. Education is the business of changing people in desirable ways. The key to understanding this objective is the idea of accepting children as worthwhile human beings who have the right of respect and dignity. Cast in this light, "achieving more accepting attitudes toward disadvantaged pupils" becomes extremely difficult to evaluate for one has trouble in distinguishing between attitudes toward children per se, from attitudes toward their behaviors. Further, whereas the value of every person as a separate and individual personality with inalienable rights is a universal creed, the specific behavior of people is subject to great variation depending on such factors as social class, national and ethnic origin, customs and mores. The process of evaluating behavior is the process of comparing one value system against another value system. While many values are universally accepted, others are highly variable and must be judged by the prevailing norms of society. Since teachers are the product of the social middle class, it is to be expected that their perceptions of children are based on prevailing middle class norms. Whether non-normative (non-middle class) behavior should be changed is a debatable issue and depends largely upon the consequences of the behavior.

The preceding thoughts are important to understanding that acceptance of children and acceptance of their manifest behavior are quite different. A child may feel he has the basic respect as an individual from his teachers yet be quite aware that certain of his behaviors are condemned by his teachers. One strategy used in evaluating this objective was to ask teachers to select adjectives which they believe best describe the pupils they teach. The limitations of this approach in relation to the objective are obvious. First, this approach does not measure acceptance of the child but focuses on his characteristics or behavior. Secondly, the act of describing the child may have little relation to the teacher's actual acceptance of the behavior described by the adjective. In other words, a teacher may describe children as quarrelsome or uninterested yet be accepting of the behavior as the norm in that school and not "hold it against" a child in a detrimental way. Recognizing these limitations, it was still believed important to identify teacher's perceptions of disadvantaged children's characteristics. The Adjective Checklist is an instrument containing 48 adjectives which describe social, personal, intellectual, and physical characteristics using positive, neutral, and negative toned adjectives. A random sample of 339 teachers in elementary and secondary level target schools reacted to the checklist by selecting 16 adjectives which best describe pupils they teach in terms of how they differ from the "average" child.

Six adjectives were selected by 60% or more of the teachers completing the checklist. These adjectives were: "quarrelsome," "unpredictable," "active," "disruptive," "mischievous," and "changeable." The adjectives least selected (10% or less) by teachers to describe their pupils were: "idealistic," "harmonious," "dynamic," "intent," "civil," and "patient."

Further analysis revealed that there was much similarity in responses of elementary and secondary level teachers with two exceptions. Positive adjectives describing intellectual and physical attributes declined significantly from the elementary to the secondary level. Thus, the intellectual attributes of "curiosity," "discernment," "creativity," and "interest" declined in terms of teacher judgment as well as the physical attributes of being "dynamic," "vigorous," and "neat." The decline from elementary to secondary school noted here is corroborated by student ratings of their interest and enjoyment in school. On the student survey, reported under program evaluation, the question "do you like school" was asked of elementary and secondary pupils. Whereas approximately 85% of elementary pupils answered affirmatively, only 75% of the secondary pupils answered affirmatively. On the same survey when students were asked "do you look forward to coming to school," there was a decline of approximately 20% of affirmative answers from elementary to secondary pupils.

Most of the adjectives which were selected were social in nature (38%), followed by personal (32%), physical (32%), and intellectual (25%). One may infer from this that teachers feel that unless children's social needs are met first, their intellectual needs cannot be met satisfactorily.

Whether the teacher's perceptions are accurate or distorted cannot be judged from these data; that is, whether the pupils are actually fundamentally different or whether the teachers have misperceived their pupils cannot be determined. Since such pupil characteristics as those perceived by teachers on this instrument are often stated in the rationale for identifying pupils in need of Education Act services, it seems reasonable to conclude that these perceptions are realistic. Indeed, if these pupils were "intent," "idealistic," "dynamic," etc., it is unlikely that they would be in need of the concentrated services provided by the Education Act. Finally, it should be emphasized that while most teachers may perceive essentially negative pupil characteristics it does not necessarily follow that they think less of them as individuals. It is more logical to assume that their dedication to and respect for each child is even greater than normal.

Another strategy that was used in measuring teacher acceptance of disadvantaged children was based on the rationale that if the school atmosphere in which the teacher taught was satisfactory in various ways that this atmosphere in turn would have an effect on the teacher's acceptance of the child. This strategy recognizes the fact that a teacher is a social being like every other person and the conditions under which he or she works influences the teaching process including the ways in which they interact with children. The Organizational Climate Description Questionnaire, as the name implies, attempts to measure school atmosphere. The OCDQ was completed by 313 teachers from elementary and secondary level target schools. Of the 65 items on the scale, 32 refer specifically to other teachers in the school and 33 refer to the principal or school. The instrument was not scored in the conventional manner but rather responses to individual items were recorded. The teachers rated each item on the OCDQ in terms of their frequency of occurrence. A rating of one indicates "rarely occurs;" two indicates "sometimes occurs;" three indicates "usually occurs;" and four "very frequently occurs." The theoretical midpoint of this intensity scale would be 2.5 with an effective range of from one to four. The mean ratings on each item were computed and are shown in table 2 for elementary and secondary level teachers. Rather than listing the items in the order they appear on the questionnaire, they are listed for convenience in rank order of means based on elementary level teachers. Thus, the items appearing at the beginning of the table were rated as occurring most frequently (high mean scores) whereas items listed at the end of the table occurred least frequently (low mean scores). Underneath each mean in the table is the rank order of that item. Inspection of the table shows that some items are phrased in positive and some in negative ways.

A rapid examination of table 2 shows that those items which occur with the highest frequency are typically those that are positive in tone with respect to either the teacher or the principal. Conversely, those items that project a negative tone are rated with the least frequency. Several items, it will be noted, are rather neutral in nature, e.g., extra books are readily available for use in classwork.

Some of the items have little relevance or meaning in the Cincinnati Public Schools. For example, item 50 asks whether the principal tries to get better salaries for teachers. In our school system, the principal has nothing to do with the matter of salaries.

Other items show distinct differences in the responses of elementary and secondary level teachers which are likely a function of the larger size of secondary schools in relation to elementary schools. Item 40, for example, shows that elementary teachers are "contacted by the principal each day" to a much greater extent than secondary teachers. This is probably a function of size of staff. Other items of this type are 9, 34, 54, and 65.

Further examination of the items shows that some are difficult to evaluate in terms of whether or not a high frequency is desirable. Other items are rather clear in their intent and interpretation. An attempt was made

Table 2. Mean Score* Values of Items Obtained on the Organizational Climate Description Questionnaire for Elementary and Secondary Level Teachers, June, 1966.

Item Number	Item	Elementary Level Target School Teachers N=230	Secondary Level Target School Teachers N=82
41	The principal is well prepared when he speaks at school functions.	3.38 (1)	3.44 (1)
32	The principal sets an example by working hard himself.	3.36 (2)	3.17 (2)
23	Custodian services are available when needed.	3.06 (3)	3.09 (3.5)
15	School supplies are readily available for use in classwork.	3.05 (4)	2.99 (6)
56	The principal is in the building before the teachers arrive.	3.02 (5)	2.67 (18.5)
7	Extra books are available for classroom use.	2.95 (6)	2.77 (15)
28	The principal goes out of his way to help teachers.	2.87 (7)	2.95 (8)
65	The principal insures that teachers work to their full capacity.	2.86 (8.5)	2.41 (28)
63	The principal is easy to understand.	2.86 (8.5)	2.97 (7)
4	Instructions for the operation of teaching aids are available.	2.84 (10)	2.79 (14)
53	The principal looks out for the personal welfare of teachers.	2.81 (11)	2.67 (18.5)
19	Most of the teachers here accept the faults of their colleagues.	2.80 (12)	2.80 (13)
25	Teachers prepare administrative reports by themselves.	2.79 (14)	2.63 (21)
36	The principal uses constructive criticism.	2.79 (14)	2.86 (11)
60	The principal tells teachers of new ideas he has run across.	2.79 (14)	2.81 (12)

(Continued)

*Scores indicate frequency of occurrence. One equals rarely occurs and four equals very frequently occurs.

Table 2. Mean Score* Values of Items Obtained on the Organizational Climate Description Questionnaire for Elementary and Secondary Level Teachers, June, 1966. (Continued)

Item Number	Item	Elementary Level Target School Teachers N=230	Secondary Level Target School Teachers N=82
21	There is considerable laughter when teachers gather informally.	2.78 (16.5)	3.01 (5)
35	The morale of teachers is high.	2.78 (16.5)	2.93 (9)
49	The principal explains his reasons for criticism to teachers.	2.72 (18)	2.91 (10)
31	The teachers accomplish their work with great vim, vigor, and pleasure.	2.69 (19)	2.64 (20)
11	In faculty meetings there is a feeling of "let's get things done."	2.67 (20.5)	2.58 (22)
45	The principal criticizes a specific act rather than a staff member.	2.67 (20.5)	3.09 (3.5)
51	Extra duties for teachers are posted conspicuously.	2.66 (22)	2.35 (32.5)
27	Teachers in this school show much school spirit.	2.59 (23)	2.68 (17)
39	The principal makes all class scheduling decisions.	2.53 (24.5)	2.54 (23)
8	Sufficient time is given to prepare administrative reports.	2.53 (24.5)	2.51 (24)
54	School secretarial service is available for teachers' use.	2.49 (26.5)	2.11 (42.5)
55	The principal runs the faculty meeting like a business conference.	2.49 (26.5)	2.38 (29)
59	Faculty meetings are mainly principal-report meetings.	2.47 (28)	2.46 (27)
58	Faculty meetings are organized according to a tight agenda.	2.39 (29)	2.36 (31)
42	The principal helps staff members settle minor differences.	2.38 (30)	2.50 (25)

(Continued)

Table 2. Mean Score* Values of Items Obtained on the Organizational Climate Description Questionnaire for Elementary and Secondary Level Teachers, June, 1966. (Continued)

Item Number	Item	Elementary Level Target School Teachers N=230	Secondary Level Target School Teachers N=82
38	Teachers socialize together in small select groups.	2.34 (31.5)	2.37 (30)
40	Teachers are contacted by the principal each day.	2.34 (31.5)	1.65 (59)
3	Teachers spend time after school with pupils who have individual problems.	2.32 (33)	2.70 (16)
43	The principal schedules the work for teachers.	2.30 (34)	2.49 (26)
47	The principal corrects teachers' mistakes.	2.27 (35)	2.35 (32.5)
24	Routine duties interfere with the job of teaching.	2.26 (36)	2.24 (38)
48	The principal talks a great deal.	2.23 (37.5)	2.14 (40.5)
52	The rules set by the principal are never questioned.	2.23 (37.5)	2.14 (40.5)
13	Teachers talk about their personal life to other faculty members.	2.21 (39.5)	2.26 (36)
62	The principal checks the subject matter ability of teachers.	2.21 (39.5)	2.20 (39)
5	Teachers invite other faculty members to visit them at home.	2.19 (41)	2.32 (34)
33	The principal does personal favors for teachers.	2.14 (42)	1.88 (47)
29	The principal helps teachers solve personal problems.	2.11 (43)	2.28 (35)
9	Teachers know the family background of other faculty members.	2.09 (44)	1.74 (53)
50	The principal tries to get better salaries for teachers.	2.07 (45)	1.80 (52)

(Continued)

Table 2. Mean Score* Values of Items Obtained on the Organizational Climate Description Questionnaire for Elementary and Secondary Level Teachers, June, 1966. (Continued)

Item Number	Item	Elementary Level Target School Teachers N=230	Secondary Level Target School Teachers N=82
12	Administrative paper work is burdensome at this school.	2.05 (46)	2.11 (42.5)
1	Teachers' closest friends are other faculty members at this school.	2.02 (47)	2.25 (37)
20	Teachers have too many committee requirements.	1.96 (48.5)	1.89 (45.5)
64	Teachers are informed of the results of a supervisor's visit.	1.96 (48.5)	1.89 (45.5)
37	The principal stays after school to help teachers finish their work.	1.93 (50)	1.85 (49)
17	Teachers have fun socializing together during school time.	1.92 (51)	1.98 (44)
61	Teachers talk about leaving the school system.	1.91 (52)	1.83 (50)
57	Teachers work together preparing administrative reports.	1.86 (53)	1.71 (54)
16	Student progress reports require too much work.	1.82 (54)	1.86 (48)
30	Teachers at this school stay by themselves.	1.80 (55)	1.61 (60)
46	Teachers help select which courses will be taught.	1.76 (56)	1.67 (56)
44	Teachers leave the grounds during the school day.	1.72 (57)	1.49 (63)
34	Teachers eat lunch by themselves in their own classroom.	1.67 (59)	1.37 (64)
14	Teachers seek special favors from the principal.	1.67 (59)	1.58 (62)
6	There is a minority of teachers who always oppose the majority.	1.67 (59)	1.66 (57)

(Continued)

Table 2. Mean Score* Values of Items Obtained on the Organizational Climate Description Questionnaire for Elementary and Secondary Level Teachers, June, 1966. (Continued)

Item Number	Item	Elementary Level Target School Teachers N=230	Secondary Level Target School Teachers N=82
26	Teachers ramble when they talk in faculty meetings.	1.66 (61)	1.82 (51)
2	The mannerisms of teachers at this school are annoying.	1.61 (62)	1.59 (61)
22	Teachers ask nonsensical questions in faculty meetings.	1.59 (63)	1.68 (55)
10	Teachers exert group pressure upon non-conforming faculty members.	1.55 (64)	1.66 (57)
18	Teachers interrupt other faculty members who are talking in staff meeting.	1.47 (65)	1.31 (65)

to identify the latter type of items. Those items which could clearly be classified as either positive or negative in tone and clearly intended for principal or teacher were grouped. The remaining items were ignored. With each item classified as to positive or negative tone and directed toward principal or teacher, the mean frequency ratings were computed. These are shown in table 3.

It is apparent that those items which are positive in tone should show high frequency ratings and those with a negative tone should show a low frequency rating providing, of course, the class of persons being rated are "good" on those characteristics. Table 3 shows that this pattern exists in both the elementary and the secondary levels. In each comparison of item tones for both principals and teachers, the positive toned set of item statements has a significantly higher frequency of occurrence than the negatively toned item statements. Furthermore, at both the elementary and the secondary level the positive toned statements were higher for the principal than for the teacher. Negative toned statements, however, were also higher for the principals than they were for the teachers. In general, there is a striking similarity in corresponding mean scores between the elementary and the secondary teachers.

Table 3. Mean Frequency Ratings of Selected Items on the OCDQ Classified by Positive or Negative Tone of Statement and the Group to Whom the Statement Refers.

Group to Whom Statement Refers	Means of Positive Toned Statements	Means of Negative Toned Statements
	Elementary Level Teacher's Ratings	
Principals	2.70 Items included: 28, 29, 32, 33, 36, 37, 41, 42, 45, 49, 53, 56, 60, 63	2.19 Items included: 12, 14, 47, 48, 52, 58, 59, 62
Teachers	2.42 Items included: 1, 3, 5, 9, 17, 19, 21, 27, 31, 35	1.73 Items included: 2, 6, 10, 18, 22, 26, 30, 34, 38, 61
	Secondary Level Teacher's Ratings*	
Principals	2.72	2.17
Teachers	2.51	1.69

*Items classified same as elementary level teachers.

Of interest is the fact that the positive toned statements directed toward teachers included five statements having to do with social relationships among teachers within a school (items 1, 5, 9, 17, and 21). These "social" items tended to be rated rather low in frequency indicating that social interaction among teachers, such as visiting one another's home, knowledge of family background, etc., occurs with a relatively low frequency. There does seem to be, however, a healthy professional relationship and respect among the staff. This same phenomenon carries over to the principal.

The principal is viewed by teachers as a well prepared, hard working, helpful and sympathetic person who is interested in the welfare of the teachers. The principal, however, is not viewed by the teachers as helping them in solving personal problems with any degree of frequency, nor is he rated frequently as a person who "stays after school to help teachers finish their work." In general, then, it would appear that while professional characteristics are rated with high frequency for both teachers and principals, the amount of social interaction is considerably lower in frequency.

Finally, it is well to remember that teachers did not identify themselves when they completed this instrument (or any other measure used in this report). It is unlikely that certain responses were made because of possible consequences. Certainly, interpretation of the results would be more meaningful if norms were available from non-target school teachers.

Recommendations

1. Members of the project staff and others in leadership positions need to assimilate the findings contained in this report and reflect on the implications of the findings to further development of this project. For example, what are the implications and ramifications of the negative perceptions that teachers have of pupil characteristics in contrast to the rather positive self-image that the program evaluation revealed?

2. Specialized training programs for principals of target schools should be designed to strengthen their leadership role in staff development within their school. Part of this training program should involve a complete briefing on the important findings from program and project evaluation. Principals, in turn, could disseminate and discuss these findings with their staff.

3. The Staff Development project staff should assist individual schools in the following ways:

    a. Formulating and implementing training plans

    b. Providing special consultant help

    c. Disseminating information on other similar training programs

    d. Providing bibliographic and other training aids

e. Provide for interaction of training personnel from one school to another

f. Help identify teachers who have unusual skills in certain areas for training purposes.

Summary and Conclusions

This project is based on the assumption that school personnel charged with the responsibility of educating disadvantaged youth need specialized knowledge and skills to better meet the needs of these children. The project brought a few consultants to the staff of the target schools via television. In addition, it set up machinery to engage individual school staffs in discussions of relevant issues. The latter task was conducted by the school principals. Due to the limited time during which this project operated and the pressing demands on staff to implement the more direct-service projects, the Staff Leadership and Development project hardly got underway before the school year ended. Several instruments were devised or identified and administered to target school teachers in order to secure baseline data regarding their knowledge and attitudes toward disadvantaged children.

The important findings and conclusions resulting from these measurements (which were responded to anonymously) are as follows:

1. Target school teachers show a fair amount of knowledge as measured by the Urban Education Information test of disadvantaged children. They seem to know most about their personal characteristics. Elementary and secondary level teachers are similar in their knowledge as measured by this test.

2. Some evidence from the Urban Education Information test revealed also that teachers believe, in general, that their attitudes and expectations are most important in successfully educating disadvantaged children.

3. As indicated by the Adjective Checklist the predominant perceptions of teachers to the characteristics of disadvantaged children are: quarrelsome, unpredictable, active, disruptive, mischievous, and changeable. The least common characteristics are idealistic, harmonious, dynamic, intent, civil, and patient.

4. Positive intellectual and physical attributes of disadvantaged children are perceived more by elementary level than secondary level teachers on the Adjective Checklist. Assuming this to be a valid observation, one may infer that these attributes decline (rather than being differently perceived) from elementary to secondary school.

5. As reflected by the Organizational Climate Description Questionnaire (OCDQ), the target school atmosphere seems to be a healthy one. Teachers view their principals as hard working, competent and sincere individuals. Professional relations among staff members seem good, although social interaction outside the school setting is minimal.

6. On a philosophical continuum of rationalism to empiricism, target school teachers tend to be more empirical or pragmatic than rationalistic or idealistic.

JNJ/kra

IN-SERVICE TRAINING

Introduction

The In-Service Training project was designed to provide specialized preparation for remedial reading teachers and resource center librarians in target schools. This training was provided in the summer of 1966 to facilitate the full-scale operation of other Education Act projects in the 1966-67 school year. Qualified remedial reading teachers were needed for the enrichment and remediation projects operating in primary target schools. The development of resource centers in both primary and secondary target elementary schools posed the problem of training sufficient teachers to staff them. Because these positions had to be filled largely from the regular professional staff of the school system at no increase in salary, providing the necessary training without cost to the prospective specialists seemed imperative.

Summer training in problem diagnosis and remedial reading instructional techniques for teachers at both the elementary and the secondary level was contracted to the University of Cincinnati. Many opportunities were available for students to observe, participate and give actual instruction to small groups of retarded readers.

Elementary resource center personnel, commonly called "teacher-librarians," were trained at institutions offering library science courses and had their tuition reimbursed under the project for as much as eight semester or 12 quarter credit hours.

Objectives

The major objective of this project, then, was to provide a program to train required personnel for the remediation and enrichment projects and the Educational Resource Centers project. This training was aimed at achieving the following goals:

1. To help teachers acquire knowledge and techniques in these two specialized areas.
2. To make the services of these qualified personnel available to children in the primary and secondary target schools.
3. To give children an opportunity to develop the skills and knowledge necessary for academic success.

Project Narrative

The In-Service Training project was approved February 21, 1966. The initial activity was a two-day remedial reading workshop for teachers employed under the remediation and enrichment projects. Twenty-five remedial reading teachers (or resource teachers spending half time with retarded readers) participated. The workshop was conducted on March 22 and 23 at Hays school by Dr. Helen Caskey, reading specialist from the University of Cincinnati. It included background lectures, description of programs by participants and discussion of problems encountered.

In an agreement between the Board of Education and the University of Cincinnati in March, 1966, the university agreed to provide special courses in remedial reading instruction during the first and second summer terms and to arrange for instruction of trainees through laboratory experiences with practicing remedial teachers. Tuition and registration fees of remedial reading teachers were to be paid by the Board of Education from project funds.

Arrangements were made for reimbursement of the tuition fees of teachers who trained for appointment as teacher-librarians in target schools, up to eight semester hours or 12 quarter hours of credit for basic library courses. This opportunity, as well as the training opportunity for remedial reading trainees, was publicized in the March 25 issue of Better Schools, the official publication of the Cincinnati Board of Education. Applications for enrollment in the remedial reading courses or for employment as teacher-librarians were made available from the Division of Staff Personnel.

A library consisting of professional books, practice materials and samples of selected books and teaching devices for remedial reading, was ordered during April. Similarly, a collection of library reference books was ordered for use by trainees taking library courses. These libraries were temporaily housed at U.C. during the summer and returned to the Professional Library at the Board of Education for future use by teachers and librarians in target schools.

Opportunity to enroll in the summer remedial courses at the University of Cincinnati was eventually extended to resource teachers and other teachers in target schools who worked with retarded readers. However, the competing demands for staffing elementary summer school classes in the 30 target schools presented a problem, These staff needs included a teacher of remedial reading in each summer school. It was also felt that the response of prospective trainees was limited by the late announcement of the opportunities.

As a result of this project, 24 teachers enrolled in the special remedial reading courses at the University of Cincinnati and 16 teachers took one or more courses in librarianship at a recognized university. This project has resulted in the upgrading of these teachers by preparing them for positions in remedial reading or as librarians. Thus, it has enabled children to be given more specialized help through better trained teachers.

In the current (1966-67) project year the services of nearly all personnel trained in the project are coordinated under the Elementary Remediation and Enrichment project. At the same time, the Staff Development, Leadership and In-Service Training project includes consultant services, workshops, university courses, visits and conferences for both remedial reading and resource center teachers.

Evaluation Procedures and Results

The first two goals of this project were procedural in nature, i.e. to train teaching specialists and to make them available to target school children. The third goal, to give children an opportunity to develop necessary skills, is an inferential objective. The need for establishing the training opportunities was dictated by other Education Act projects: the remediation and enrichment projects, which provided remedial reading instruction, and the Educational Resource Centers project, which required staffing the resource centers with adequately trained teacher-librarians.

Ultimately, therefore, the real success of this project will be identical to the success of the projects it complemented. If pupils in target schools do indeed overcome obstacles to academic achievement created by reading deficiencies and if they do indeed show indication of the academic advancement and cultural enrichment that the learning resource centers are designed for, then one may infer that the In-Service Training project was successful.

In view of the long-range nature of the goals indicated above, the best approach to evaluation at this time is to inspect the direct effect of the in-service training opportunities on meeting personnel needs for remedial reading and resource center teachers. The evaluation, therefore, will be divided into two categories, according to the areas of training offered. Since the program for training remedial reading teachers was centered in one institution, it is possible both to examine the subsequent employment of class members and to review the staffing of remedial positions in the target schools. Training in library science, on the other hand, was taken in a number of colleges and universities, so that the evaluation of this area must be confined to the contributions made by the project to the training of the current learning resource center staff.

Remedial Reading Teachers. An important part of the remedial service offered to elementary level primary target pupils is individual and small group instruction by remedial reading specialists. Although such remedial work has been done in Cincinnati schools for a number of years, the project provided an opportunity to intensify this instruction, as dictated by the widespread deficiencies in reading among disadvantaged pupils. To accomplish this task, an increased number of qualified personnel was needed, and tuition-free training opportunities became essential.

Twenty-five teachers enrolled for the first summer term of remedial reading methods. Of these, one was enrolled as an auditor and two discontinued the course before the end of the term. Thus, 22 students completed the first term for credit, nine receiving a grade of A and 13 receiving B.

Of these 22 students, 18 continued in the second term; one new student also was enrolled. All 19 finished the term, ten receiving A and nine B.

Therefore, a total of 24 teachers received at least one term of instruction in remedial reading methods. Ten of these were employed as remedial reading teachers in elementary primary target schools for the 1966-67 school year, and one is serving as a volunteer teacher in this area. Two others are teaching Reading Improvement as a part of a secondary school assignment. Another four of the class group have been assigned as resource teachers in primary target schools. Of the remaining seven teachers who took the remedial reading summer class, six are employed in various positions in Cincinnati target schools. Their assignments include administrative aide, pre-reading, first and second grade teaching, and secondary assignments in English and English-Mathematics.

The personnel needs for remedial reading teachers in primary target schools have been met. The Division of Staff Personnel indicated that the staffing presented few problems because of the training opportunities provided by the project and the long-standing recognition of the need of remedial help in reading among disadvantaged children.

In all, 16 remedial reading teachers are employed in the 11 primary target elementary schools. Ten of the 16 participated in the summer classes under the project. These included three teachers who are new to the system, five who had other elementary level assignments in 1965-66 and two who were assigned as remedial reading teachers last year. Two of the six teachers who were in the summer class taught remedial reading in Cincinnati schools in 1965-66.

Resource Center Teacher-Librarians. Under the Educational Resource Centers project new libraries were planned for 25 primary and secondary target elementary schools, and existing libraries were to be improved in the seven remaining schools. A resource center also was included in the new Burton school, which qualified as a secondary target school for the 1966-67 school year. To make optimum use of these centers, it was vital that personnel with experience in teaching elementary pupils be trained in library methods. Again, the position offered no advancement in salary, so that the opportunities for such training had to be offered at no cost to the teachers.

At the present time teacher-librarians have been assigned to resource centers in all but two of the target schools. Of these 31 teachers, 16 took courses in library science in the summer of 1966. Tuition of these courses was reimbursed through the project. Five of the 16 are continuing to take course work in the 1966-67 academic year. Ten other resource center teachers, not enrolled in the summer term, also are currently taking library science courses.

For the most part, this course work is in basic areas such as bibliography, materials, technical aspects and library management and functions.

Because the state of Ohio has no special certification in library science at the elementary level, the resource center teachers are concerned only with increased professional competence, not with meeting certification requirements. Nevertheless, one teacher is a fully certificated librarian, having completed 30 credit hours of library science work. All others have either Kindergarten-Primary or Elementary certificates.

In all, nine of the 31 resource center teachers have completed more than ten credit hours each in library science. A median of 7.17 credit hours has been completed by the group.

The project did make it possible to meet the staffing needs of the resource centers. Generally, according to the Division of Staff Personnel, these needs posed a greater recruitment problem than those for remedial reading teachers. It is doubtful that adequate staff could have been procured without the project.

Recommendations

The basic purpose for which the In-Service Training project was designed has been accomplished. The personnel needs of the related projects have been met. Nevertheless, continuous professional growth is very important as the personnel trained under this project perform their specialized duties. A few recommendations seem pertinent.

1. That remedial reading and resource center teachers trained under the project be encouraged to continue to build on the minimum foundation of specialized knowledge thus provided. Teachers should be encouraged to participate fully in available workshops and to take advantage of the opportunities for course work in their areas of specialization in the coming year. They should also be stimulated to enlarge their professional understandings through widespread independent reading and study.

2. That teachers trained under the project attempt to convey useful understandings to other project personnel, particularly to the classroom teachers. Resource centers, for example, will be optimally effective only if the classroom teachers are sympathetic to their aims and knowledgeable about guiding their pupils in using the centers. Similarly, an

awareness of basic concepts in remedial reading can notably enhance the work of the classroom teacher both with pupils who are receiving remedial instruction and with others who might have lesser reading difficulties.

3. That consideration be given to extending the concept of tuition-free education to any other areas where personnel needs are greatest. This practice seems to have considerable merit.

Summary and Conclusions

The In-Service Training project was initiated because specially trained personnel were needed for remedial work and staffing of the educational resource centers under the other Education Act projects. Opportunities were provided for prospective teachers in remedial reading classes and resource centers to obtain tuition-free courses in the summer of 1966. Twenty-four remedial reading teachers completed at least one term of summer instruction at the University of Cincinnati. For the most part, these teachers were employed for remedial instruction in primary target elementary schools. Others are serving in various target school positions where their acquaintance with remedial methods is either essential or helpful.

Sixteen of 31 teachers hired as resource center teacher-librarians took courses in library science in the summer term under the project. Fifteen were enrolled in course work in the current (1966-67) academic year. As with remedial reading teachers, the minimal personnel needs of all of the currently operating resource centers have been met.

On the basis of this provision for staffing needs, the project may be termed successful. It is imperative, however, that benefits accrued from the project be enlarged upon by continuous encouragement of professional growth among the teacher participants. Not only should they be stimulated to increase their own professional competency through additional course work and profitable independent study, but they also should share the understanding they have acquired with other professional personnel who could benefit. Finally it is recommended that the approach of the project to meeting personnel needs might be adaptable to other situations in which specially trained personnel are required.